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ORIGINAL DEPARTMENT.

LECTURE.

HEMORRHAGE FROM THE BOWELS IN TYPHOID FEVER.

A Clinical Lecture delivered at the Hospital of the
University of Pennsylvania, Sept. 13th, 1881,

BY WILLIAM PEPPER, M.D.,

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Reported by WM. H. MORRISON, M.D.

GENTLEMEN:—I have brought before you, this morning, a specimen and a patient; both illustrating the same condition.

This specimen was taken from the body of a patient who had died from hemorrhage from the bowels in typhoid fever. The patient who is now before you has also suffered from severe hemorrhage from the bowels, but has greatly improved.

There are a great many questions of practical importance connected with this subject, and I think that I cannot do better, to-day, than show you this specimen and this patient, and make a few practical remarks upon the subject of intestinal hemorrhage in typhoid fever.

It is a common enough complication of typhoid fever. I shall try to indicate the various sources of the bleeding, the relative gravity of the different cases, and the proper treatment.

First, let me give you the history of the case from which this specimen was taken:—

The patient was a lawyer, ambitious, and working hard at his profession; probably about twenty-five years of age. He began to feel badly about the 20th of August, but refused to give up his work. About August 28th he became so ill that he finally was obliged to take to his bed. The

disease had lasted at least ten or fourteen days before he gave up. About the fourth or fifth day after going to bed, perhaps on the third, his temperature was as high as 104°. About a week after giving up work he began to bleed from the bowel, and from this time until his death the bleeding continued, despite all that was done by his medical attendant. The blood flowed from him steadily; any movement, or any attempt to swallow, would be followed by sudden ejection of blood. This continued for about four days.

Having just returned to the city, I was asked to see him in consultation, but reached the house about half an hour after he had died.

The next day we made the autopsy. The spleen was very much enlarged. It was not less than four times as large as natural, and must have weighed a pound and a half or two pounds. This enlargement of the spleen is a constant accompaniment of typhoid fever. Whenever we have a disease of this kind, that is, one in which there is a poison in the blood, we find that the spleen undergoes enlargement; but in typhoid fever there appears to be a special element causing enlargement of the spleen. It may be that the extensive lesion of the intestine has something to do with it.

We also found the mesenteric glands much enlarged in this case. I will show you a few of them now. In health they are hardly larger than a split pea, and almost invisible. Here are three or four, enlarged, and making a lump as large as a pigeon's egg. On cutting them open we found them pink in color and softened.

Enlargement of the mesenteric glands is, then, the second anatomical peculiarity in typhoid fever. This is directly connected with the in-

inflammation of the glands of the mucous membrane. The degree of enlargement of the mesenteric glands is directly proportional to the severity of the lesions in the intestine.

A third constant lesion in this disease is enlargement and ulceration of the glands of Peyer, that is, the agminated glands, arranged in patches along the ileum, and most numerous near the ileo-cæcal valve; the solitary follicles are also enlarged.

In this specimen the enlargement of the solitary follicle is not great. I here show you (indicating on the specimen) a circular ulcer with thickened lips. That is a very characteristic ulcer of typhoid fever. It is small; it is seated in a Peyer's patch. The whole thickness of the mucous membrane has been cast off as a slough. Such an ulcer could not appear before the third week of the disease. The ulceration has gone through the submucous layer, but it was not from this ulcer that the greater hemorrhage came. The source of the hemorrhage was this sloughing, gangrenous ulcer I now show you. It was covered with a mass of soft, pulpy, almost gangrenous tissue, which was readily removed by a stream of water. There was no tendency to limitation of the ulcer. It spread around the whole circumference of the bowel.

This severe bleeding had not been caused by a vessel being opened by the ulceration, but was due to the leaking from the numerous distended vessels in this sloughing ulcer.

There are several superficial ulcers in the cæcum. The ileo-cæcal valve is much thickened, and would, of course, offer great obstruction to the passage of matter into the large intestine. The whole colon was filled with blood and completely distended.

Let us now study the patient before us. I will give you his history. He is a Frenchman, age 24 years. He has been in this country three months. Let me say here that typhoid is very common in new comers. Visitors to Paris and those who go from this country to reside there constantly get typhoid fever. The disease is perhaps more common in Paris than in any other centre in the world. The patient has been out of health ever since leaving France. The present illness, he says, began about August 30th. To day would, then, be about the fourteenth or fifteenth day of the disease, but I presume that the disease began earlier than the date he gives us. The trouble began with pain in the back, loss of appetite, bleeding of the nose, looseness of the bowels and great weakness. The ordinary early symptoms of typhoid fever.

He was admitted to the hospital on September 1st, at which time his mind was dull, he was disposed to sleep, answered questions with difficulty or not at all. The tongue was coated with a yellowish-white fur, swollen, and marked by the teeth. The temperature was 103°, pulse 100, and respirations 24.

He was confined absolutely to bed. He was given for food merely milk reduced with water.

On the third, the condition of mind was unchanged. The tongue was dryer and browner, from breathing through the mouth. He had two soft passages.

4th. No noticeable change; bowels moved twice; stools fetid.

5th. Very dull; headache continues. He complains of uneasiness and distress in the bowels. Bowels not moved. At this time he was placed, by Dr. Dunn, on a pill containing—

R. Argenti nitratæ,	gr. $\frac{1}{4}$
Pulv. opii,	gr. $\frac{1}{4}$

This was given three times a day. This was given with the certain knowledge that the man was passing into a state of advanced ulceration of the glands of Peyer and of the solitary follicles. It was given to modify favorably this ulceration and possibly prevent some of the swollen glands from going on to ulceration.

6th. The condition was unchanged at the morning examination. One spot of eruption was observed. In the afternoon of the sixth he had a large hemorrhage from the bowel. About twelve ounces of blood were passed. There was also some fecal matter with the blood. He complained of some pain and tenderness and distention of the bowel. The pulse fell twelve beats, and the temperature fell one degree.

He was then ordered—

R. Vini ergotæ,	3 ss
Tinct. opii,	gtt. xv.

to be repeated every half hour, until four doses were taken. The pills of silver and opium were given more frequently. The milk and water (two parts milk and one of water) was also continued.

7th. The next day the bowels moved once. There were a few clots of blood; abdomen still tympanitic; mind clearer.

8th. Headache and all pain has ceased; rested poorly; tongue foul and coated; dark in the centre and yellow toward the sides; two movements of the bowel, which were thin, fetid, yellowish or ochre colored, and attended with a little pain; some tympanitis; more eruption.

9th. No marked change; less tympanitis; two yellow stools; no blood.

11th. Condition about the same; three passages, but no blood.

On the morning of the sixth the pulse was 112; respirations 27, and temperature 102°. After the hemorrhage, pulse 102; respirations 23; temperature 101°. Since then the temperature has fluctuated. This morning it is 104°.

This man is, I think, in about the third week of the disease. He has been very sick. He has had a large hemorrhage; a temperature of 104°; pulse of 112; respiration rate of 27, with a tendency to diarrhoea, and marked nervous symptoms. His treatment has been very simple. He has not had a drop of stimulus of any kind. For food he has taken nothing but milk and water. He has received three or four doses of ergot and the pills of nitrate of silver and opium. For the relief of the tympanitis, turpentine stupes were employed.

Let us now consider the causes of hemorrhage. You will observe in a certain proportion of cases that bleeding occurs early, say about the eighth or tenth day. Such hemorrhages are small, and have, as far as I have seen, no serious significance. They have seemed to me to be due to the intense congestion of the large bowel, and occasionally they have come from the engorged hemorrhoidal veins in the rectum. I have seen these small hemorrhages occurring in a large number of cases which afterwards ran a mild and perfectly natural course. Still, when you find blood in the stools, you will feel very much alarmed, for you do not know but that the next passage will be followed by fatal hemorrhage.

The worst hemorrhages however, occur when the sloughs are separating—any time from the beginning of the third week, on. At this time there is danger of bleeding in every case of typhoid fever. It may occur in cases going on perfectly well, and where there have been few abdominal symptoms. The ulcers may be few in number, but may extend deeply, opening a blood vessel. If the walls of the vessel have not retained their tonicity and contractility, you may not be able to check the hemorrhage.

Again, we may have hemorrhage, beginning in cases where the disease is of a malignant type, where the vitality of the whole system is greatly lowered; when you have leakage of blood developed in these cases, it is always a very grave symptom; for in such a condition the vessels do not respond readily to remedies, and the patient is in a very unfavorable condition for having hemorrhage.

After a mild hemorrhage, occurring early, the pulse is not materially altered and the tempera-

ture remains the same; but after a grave hemorrhage, there will be marked shock. I have seen the temperature fall three or four degrees. Of course, in a short time, the temperature again goes up. Thus, in this case, we had a fall of a degree in the temperature. A fall in the pulse is less common. I have seen a fall of temperature attended with an increase in the pulse rate. The fact that the pulse comes down, is rather favorable than otherwise. I should consider the prognosis more favorable if, after a severe hemorrhage, the pulse remained down, while the temperature increased, than if, while the temperature remained down, the pulse became rapid and feeble.

How are we to meet these hemorrhages, where they are so small and occur so early. I never make any change in the treatment. I simply watch carefully. But where there is a large hemorrhage, you cannot stand by waiting and watching. I want to impress upon you, here, the fact that you have a patient very ill with typhoid fever, who has still a considerable period of illness to go through, and that he requires the greatest possible care in his diet and treatment, and that nothing should be put into his system that would have a depressing or disturbing effect, unless it is absolutely necessary. I am sure that there are many modes of treating hemorrhage, which you might be tempted to employ, that would be worse to the patient than the hemorrhage itself.

In this first case, we had a hemorrhage which nothing would stop. In the man before us, very little was done for the hemorrhage, for I think that three or four fifteen drop doses of wine of ergot could have but little influence on the bleeding. If we had set on this man with large doses of astringents, if we had commenced powerful stimulation, we might have so irritated the gastrointestinal canal as to rather favor hemorrhage than to arrest it.

I should not dare to trust a patient with a large hemorrhage to nature alone, but I want to impress upon you that you should not feel compelled to at once put the patient on active antihemorrhagic treatment.

What, then, is the safest course to pursue? In the first place, I shall suppose that you have treated the case judiciously from the beginning. I am sure that if you have done this, *i. e.*, kept the patient absolutely quiet, kept him on a suitable diet, as skim milk, light meat broths, etc., given a small quantity of diluted alcohol, if alcohol is demanded, and given those drugs that modify the diseased action and lessen

ulceration, bad hemorrhage will be very rare in your practice. In proportion as the treatment is disturbing and calculated to irritate the local lesions of the intestinal canal, there will be danger of bleeding. If the treatment has been judicious the patient will meet his hemorrhage in a good state of preparation. The stomach and bowels will be in the best condition possible for receiving and assimilating food.

The best thing to do first is to apply ice over the abdomen. A bladder may be filled with cracked ice and applied over the right side of the abdomen. This can do no harm and may do good. I do not believe that it can do much good.

I would then inject into the subcutaneous tissues of the abdomen full doses of ergotine. I cannot doubt that ergotine exerts a positive effect upon the walls of the vessels, as far as they are capable of responding. Where there was purging, I should give such astringents as acetate of lead, tannic acid, gallic acid, and the astringent salts of iron. I should use them in the order mentioned. If the stomach was irritable, I should give no astringents by the mouth, but would give them by suppository or injection. Suppositories of acetate of lead, tannic acid or sulphate of iron might be used, or I might inject into the bowel a diluted solution of Monsel's salt or tannic acid.

There are two drugs which demand careful attention.

First, opium. The consideration of the question relating to the use of opium in typhoid fever is very important. I think that I have seen patients with hemorrhage from this disease killed by the narcotic doses of opium administered to them. It is important that the peristalsis of the bowel should be arrested. Patients with typhoid fever do not bear opium well. Where there has been hemorrhage from other causes, as in phthisis, or after labor, opium is born well. In the specific fevers opium in large doses acts as a depressant to the nerve centre. We must consider very carefully how far we may use opium to quiet the intestinal canal in typhoid fever. Opium does not always act in specific fevers as under other circumstances. It sometimes irritates and aggravates those symptoms which it is given to allay.

The use of opium in this case was perfectly judicious. He took fifteen drops of laudanum (which contains about half a grain of opium) at a dose. He received four doses, or about two grains of opium. If the hemorrhage had returned, I should not have been favorable to pushing the opium until the constitutional effect

was produced. I should have continued to give it in moderate doses, watching its effects. Moderate doses of deodorized tincture of opium or laudanum may be used, or a small amount of morphia may be injected hypodermically. In my use of opium I should be governed more by the tendency to actual diarrhoea, than by the tendency to freedom of hemorrhage. What good could opium have done in this first case? I think very little. It could have done a vast deal of harm if given in large doses. In the case before us, opium would have been borne much better if it had been required, for we had a cause of hemorrhage which was brought into action by movements of the bowel.

The second drug to which I referred is alcohol. I think alcohol is very serviceable in hemorrhage from typhoid fever. I think that patients are better for stimulation after hemorrhage, especially if it has been continuous. I should, therefore, use alcohol, governing the freedom of administration by its effect on the pulse and nervous system, unless it irritated the stomach and prevented the taking of food. If the pulse came down, the tongue remained moist, and the tympanitis did not increase, I should continue the alcohol.

This man has not had a drop of alcohol, yet he has gone through a severe illness and is doing as well as could possibly be desired.

Let us study the condition of this man to-day. He is not at all deaf. He puts out his tongue, and you see a marked ulcer on the left side. In this disease ulcers may exist on any of the mucous membranes; they may occur in the nose—and this is one of the causes of epistaxis—in the pharynx, in the œsophagus, in the trachea, in the little glands of the lung, in the glands of the intestine. Lymphoid tissue, whenever it exists, may be affected, but the local symptoms are most marked where this tissue is most plentiful, which is in the bowel.

The tongue is cleaning off nicely. It is moist. It is no longer enlarged. The expression of the face is natural. The pulse is 78 and markedly dicrotic, *i. e.*, a large beat followed by a small one. This is due to the relaxation of the artery allowing the secondary wave to be transmitted so readily that we recognize it. It is quite common in the third week of the disease. It is not a grave symptom if the pulse is not rapid.

The abdomen is moderately distended. The spleen is somewhat enlarged. There have been no new spots of eruption developed during the last few days. The appearance of the abdomen indicates that the ulcers are not yet well. His

temperature was 100.4° this morning. The treatment will be continued, and I shall try to show him to you later, so that you may be able to estimate the progress.

COMMUNICATIONS.

"HABIT CHOREA."

BY T. CURTIS SMITH, M.D.,
Of Aurora, Ind.

The name of the affection which is the subject of this paper was given to it by S. Weir Mitchell. To me it seems a very appropriate addition to the nomenclature of disease.

In his opening remarks on this neurosis he says, "I have over and over, in my clinics, called attention to a disorder of childhood which is the source of some anxiety and more annoyance, both to parents and physicians. This trouble I venture here to label habit chorea, and for reasons which I think are good, and which will appear in full as we consider the cases.

"Over and over some anxious mother will ask you to notice her child, on account of some little trick or gesture in which the child indulges. Then you will see that it is winking rapidly, or pursing up the mouth, or drawing it to one side, or perhaps the brow is lifted at intervals, or a shoulder is shrugged; or some forward movement of the jaw or head is repeated over and over at varying intervals." (Mitchell on Nervous Diseases, p. 146.)

Dr. Mitchell thinks children are more obnoxious to this affection than adults. My very limited experience shows more cases in adults than in children, and more in males than in females, though it is reasonable to suppose the reverse would be the rule where experience is large. No doubt in the adult cases seen by me the habit had begun in childhood or early life.

"In many cases the single grimace or motion is repeated for months and then disappears; and, if this were all, I should hardly think it worth while to label so trivial a disturbance of health; but in other cases the first habit is lost; by and by another takes its place, so that the variety and obstinacy of the habits become troublesome; or, worse still, the patient has a large repertory of these performances, and will execute a remarkable variety in one day. Usually, in such instances, there is some one motion which is more violent or more frequent than the others." (Loc cit.)

It is believed that this trouble results from "some fall from the plane of health," which may be discovered by careful search into the history

of the individual cases. It may grow out of the rapid changes of childhood in their growth, "Cyclical changes," which, being but transitory, "may bring or take away tendencies to neurosical disorders." No doubt such clinical facts as these, which have long since been recognized by the profession, have given rise to the commonly heard phrase in reference to some neurotic trouble in children: "O, he'll outgrow it," or, "After puberty she will be all right." Our little experience confirms that of the author referred to, in the fact that attention to a child thus afflicted increases the trouble for the time. And also that lowering of the plane of health has a like effect. It is well known that it also results in common chorea and many forms of the neuroses. Children thus afflicted are more excitable than others in health, or than themselves in health. These latter clinical facts show the close relation the disease bears to true chorea, as does also the fact that habit chorea occasionally lapses into the common type.

"If you ask an intelligent child who is thus diseased why it makes the grimaces, or repeats, at intervals, some odd movement, you will learn that while the patient is able, in most instances, to restrain itself and control the exhibition of motor disorder, this restraining power becomes increasingly difficult the longer such effort lasts, and that a certain malaise or discomfort results; while to give way and let the morbid impulse have full sway is attended with a sense of comfort and relief." (Loc cit.) Such is no doubt the fact with regard to many of these cases, in the early history of them. In one case which I have very closely observed this statement seemed to be fully verified, while in several others the habit had become so strongly confirmed that it was quite if not absolutely impossible to restrain the motion.

During the winter of 1879 and 1880 attention was called to a healthy lad of nearly twelve years, who had acquired the habit of, perhaps once every one or two minutes, suddenly lifting the right shoulder and drawing the head down. The lift in the shoulder was not apparent unless the movement was closely analyzed. The movement was just such as we often see men make when the shirt or coat collar, for some reason, causes an uneasy sensation at the nape; a kind of juke of the head. In the latter, however, there is not so apt to be the lift of the shoulder. Indeed, in the lad above referred to, I was not sure but that an uneasy fitting collar was the exciting cause of his trouble. However, during the winter of 1879 he had a very severe and

prostrating attack of bowel disease, which brought his health far below par, and kept him out of school for six weeks. Whether he had the habit prior to this severe illness I do not know, but it was very marked soon afterward. Wherever he was, about every minute or two, up would fly the shoulder and down would go the head, the movements being consonant, and in some degree regular. After keeping the case under observation for some days, and satisfying myself that the movement was largely or altogether under control of the will, I undertook his relief without using any medication whatever, but solely by an appeal to the boy's reasoning and will powers. He was a reasonable lad, and seemed all unconscious of his affliction, yet recognized it at once when his attention was called to it. First he was made to understand how awkward and ridiculous the movements made him appear, and second that the habit would not only grow on him as to the extent of the movements, but also beyond his power to control them, and third, his will power was strongly enlisted to conquer the trouble. He was gladly willing to help free himself from the habit, and the whole family were enlisted to help him. Whenever any one of them noticed the movements, he was pleasantly and playfully reminded of it. Often while poring over his studies, or reading, or playing, or in ordinary conversation, he was saluted playfully with, "now juke your head awhile," or "heave up your shoulder a bit," or "bob away now." So determined was he to conquer, and so often was he thus or otherwise reminded, that in perhaps three months not a trace of the trouble was left, nor did it assume some other nervous movement instead of this, as is often the case.

Not all cases are thus easily managed, for some are more severe and the subjects are far less tractable. Fortunate, indeed, is the case that is relieved before it reaches the confirmed and incurable habit.

Another case coming under my notice was that of a lawyer, a prosecuting attorney, who had the habit incurably fixed upon him of jerking down his head, giving it a twist to the left, and at the same time elevating one or both shoulders, and often at the same instant extending his right arm and hand or lifting the right elbow to a level with the shoulder. These movements were gone through with about once every two to five minutes, and if he was excited or intently engaged mentally they were more frequent. They had become seemingly uncontrollable, for even when spoken to concerning the movements, and while

trying to restrain them, they occurred with full regularity and frequency. He never seemed in any way annoyed or distressed because of his awkward affliction.

A similar case, but far less marked, was that of Judge B., who had the uncontrollable habit of shrugging his right shoulder, accompanied with more or less simultaneous contraction of the sterno-mastoid muscle. He was quite sensitive and greatly annoyed at these involuntary jerkings. The habit had been on him for years, and when informed that it had become confirmed and incurable he seemed much grieved.

Another case was that of a surgeon with whom I often met in the late war. He had the habit quite often, but at irregular intervals, of dropping the lower jaw, and throwing his right hand up to his chin and resting his index finger against the chin until the momentary spasm was over; also of twitching the upper lip and snuffing the nostrils about the same time. The habit had been on him long and he seemed utterly unconscious of the ghastly grimace.

The only other case I shall now name is that of a young lady, of robust appearance, whose every organ and function seem to be perfectly normal. As long as she walks or works there seems no trouble, but as soon as she ceases there is a sudden twitching of the upper lip, a snuffing of the nostrils, especially the left one; the left ala-nasi is elevated, the eyebrows are drawn down, and the lids close with a spasmodic firmness similar to that observed when one is about to be struck in the face. Also when she is sitting there are sudden jerkings of the limbs and movements of the whole body, of which she is conscious but cannot or does not control. Any depression of health increases the whole trouble.

As to treatment, we have little to say; most of the cases observed have been old, confirmed ones, and incurable. We like the plan adopted in the first case, wherever circumstances will permit. But too often such a course would be impracticable.

Wherever the cause can be ascertained remove it. If tonics are needed, perhaps arsenic is the best. The sulphate of zinc is good. Often iron, with simple bitter tonics. Where there is too great strain on the nervous economy, this must be removed. Often for children an entire change of associations and scenery are demanded.

I have never put it in practice, but have often thought it would be a good plan to so arrange a pin or other sharp instrument as that, whenever

the abnormal movements were made, it would not only be a reminder, but a painful one. The moral and painful effects would, perhaps, soon break up the habit, or go far to do so, in connection with other proper treatment, especially with tonics. This affliction seems a trivial thing, but it is no small matter to be the subject of it, or to have a near friend or relative thus afflicted. Many cases will be found among nervous children. Some will simply need toning up to health. Others will need diligent care, long and perseveringly.

THREE CASES IN GENERAL SURGERY IN WHICH THE DENTAL ENGINE WAS EMPLOYED FOR EXSECTION OF BONE.

BY J. S. WIGHT, M.D.,

Professor of Surgery at Long Island College Hospital.

CASE 1.—A boy about eighteen months of age had empyema of the left side of the thorax: a patient of Dr. Harrigan. On consultation it was determined to open the pleural cavity and let out the pus. I recommended the use of the dental trephine as the best means of getting through the rib. Dr. B. F. Westbrook gave the patient chloroform, and assisted by Dr. Harrigan I performed the following operation: An incision down on the eighth rib, two inches in length, was made, about midway between the sternum and spine; a small portion of the periosteum was raised from the rib; a trephine three-sixteenths of an inch in diameter was applied to the upper half of the rib, and by means of the dental engine a small button of bone was cut out and removed in a very few seconds; the same trephine was then applied to the lower half of the same rib, backward and downward from the place of its first application, and another button of bone was very quickly removed; there was then a complete solution of the continuity of the rib; the posterior end of the anterior costal fragment was gently raised by a small elevator, and a minute piece of it cut off with a pair of curved bone-pliers; the anterior end of the posterior costal fragment was also raised in the same manner, and a minute piece of it cut off with the same bone-pliers; there was then an opening down to the subcostal tissues, about three-eighths of an inch wide and about six-eighths of an inch long; in this opening, with a curved bistoury, a transverse incision about four-eighths of an inch in length was made directly into the pleural cavity; then there was slowly evacuated about one-half pint of so-called healthy pus. During the entire operation there

was but very little bleeding, the intercostal artery being avoided. In fine, I am quite sure that the operation in this case was performed more speedily and safely by the means employed than it could have been by any other means at our command. And it may be of interest to know that this case did well after the operation, which was performed on the 25th day of April, 1881.

CASE 2.—May 1st, 1881. Mary S., twenty months of age, was trampled on by a vicious horse, and had one of her ribs on the left side broken, near the sternum, and had a compound depressed fracture of the skull on the right side, about three and one-half inches directly above the meatus auditorius. The line of fracture was crescentic in form, and about two inches in length. A large piece of bone was bent downward, about three sixteenths of an inch; the patient was unconscious and the pupils were moderately dilated; there was marked left hemi-spasm, especially of the upper extremity; there was copious bleeding from the nose, and there was some vomiting of blood, and it was decided, on consultation with Drs. Matheson and Northridge, to elevate the depressed bone.

Dr. Matheson made an incision over the edge of the sound bone and the depressed edge of the broken bone, and cleared away a small portion of the periosteum, so that I could apply my dental trephine at the edge of the sound bone. The trephine was one-fourth of an inch in diameter, and with a few turns of the wheel of the dental engine, in a very few seconds, a small button of bone had been removed, without any injury whatever to the dura mater. Then Dr. Matheson gently inserted a small, strong elevator into the trephine hole, and under the edge of the depressed bone, using the sound bone of the skull for a fulcrum, and with the employment of considerable force, raised up the edge of the depressed fragment. The entire operation occupied only a few moments, and I am confident did not add materially to the severity of the shock; certainly the trephining could not have been done so speedily, and with so little disturbance, if I had used the ordinary instrument. It may be a matter of interest to note that this little patient did not survive her injuries.

And it may be remarked that in this case the advantages of the dental trephine may be stated by saying, there was the minimum of shock from the operation, because it was done quickly and safely, and without any special or marked additional disturbance of the general system. In fact, it is somewhat difficult to trephine a very thin skull with the ordinary trephine, as I know by

experience, and so I incline to the view that the dental trephine will be found to be more manageable than the ordinary trephine in operating on a very thin skull.

CASE 3.—A man about fifty years of age, a patient of Dr. Wallace, had severe inflammation in and around the right knee joint, ending in peri-articular abscess and some necrosis of the upper end of the tibia. This patient was admitted to the Long Island College Hospital, where, in the presence of the medical class, I made two incisions just below the knee joint, one on each side of the tubercle of the tibia, down to the bone. The periosteum at the bottom of each incision was carefully raised up, when a dental trephine one-fourth of an inch in diameter was applied, and a button of bone was removed from the compact tissue on either side. This permitted an examination of the cancellous bone in the base of the tibia, which was found to be necrosed quite extensively. The openings already made were now enlarged by a gouge and pliers, and the necrosed bone was extensively dug and scraped out, leaving, for the purpose of support, a firm bridge of compact bone in front. The cavity was dressed by packing it with oakum containing carbolic oil, and it quite rapidly filled in with scar-tissue. There was no special surgical fever following the operation. In this case Esnarch's bandage was used, rendering the operation bloodless. Also it may be noted that the operation was done under the carbolic spray; and it is worthy of remark that there was no fresh disturbance set up in the joint, notwithstanding the layer of bone left across the base of the tibia was very thin.

The above cases incline me to believe that the dental engine will be a valuable addition to the instruments of the surgeon. I am convinced that the surgeon can do some pieces of work better with the dental engine than he can with the usual instruments. Small and short points of broken bone can be safely and quickly cut off with a small circular saw run by the dental engine, and holes can be made with accuracy, facility and safety, in the ends of resected bones, for the purpose of inserting wire sutures. This would have an advantage over the ordinary hand drill, which is liable to slip and cause damage to the tissues. In one instance, swiftness of motion is employed; in the other, considerable pressure is used to perforate the bone. In re-ecting small ribs and thin skulls, and in exploring the ends of the long bones, the dental engine will no doubt prove to be of unquestionable utility, because it is safe, accurate, and speedy.

HOSPITAL REPORTS.

UNIVERSITY OF PENNSYLVANIA.

SERVICE OF WM. GOODELL, M.D.,

Professor of Clinical Gynecology.

May 25th, 1881.

Reported by GUY HINSDALE, M.D.

Recto-Vaginal Fistula.

CASE 1.—This colored woman comes to us from Delaware, with the following history. She says she is thirty-six years of age; that she is married, but has never had a child; she states that when she has a passage the contents of the bowels are passed through both the vagina and the rectum. She has, as you can all see, a fistula directly through the posterior wall of the vagina, the sound entering the vagina and emerging from the rectum. She, of course, has no control over her wind.

When I ask her the cause, she says that it came from being constipated. Recto-vaginal fistulae come usually from the pressure-scleroses and the lacerations to which the vagina is liable during a difficult labor. Usually, however, it is a vesico-vaginal fistula that is produced; where we have ten vesico-vaginal fistulae we have one of the rectum and vagina. During labor the head becomes arrested at the symphysis pubis, and continued pressure here is more disastrous than if exerted over the broad surface of the sacrum; moreover, the bowel is protected by a jutting promontory.

I will examine the neck of the womb, to see if it is a vaginal cervix. I should say that it is. Let us see if there are linea albicantes present. I find there are none. What, now, is the cause of the fistula? There may be a stricture of the rectum. These strictures may be either simple or malignant; if simple, they generally arise from syphilis, although they may also follow an abscess or any irritation, especially that of fecal accumulation. I cannot, by my questions, ascertain that she has ever had syphilis. I examine per rectum, and I find a stricture, and it is below this that we have the fistulous opening; and this is always the case. She must have great difficulty in moving her bowels. I proceed slowly, for a stricture, if malignant, is friable, and a rupture is easily caused. I should say that this stricture is about half an inch in width. Malignant strictures are of a cancerous nature, and are characterized by their irregular and nodulated induration, the fistula being produced, in these cases, by the involvement of the bladder or the vagina and the disorganization of the new growth. Here, however, we have the bowel perfectly movable, and this stricture seems merely to be a redundancy of fibrous tissue. Passing my finger within and beyond the obstruction, I find rugosities, the bowel above being in a normal state.

The three things which I wish to impress upon your minds are these: 1st, that these fistulae, in the vast majority of cases, depend upon the lesions of labor; 2d, that, if due to a stricture, we shall find the seat of obstruction above the fistulous opening; 3d, that, if the stricture is syphilitic, the fistula is extremely difficult to cure.

When the fistula, as in this case, is the result

of stricture, we must remove the stricture before we can do anything with the fistula. After a course of gradual dilatation, and after securing for her free movements of the bowels and a normal calibre of the gut, we shall be ready for the operation. The first step will be to lay open the stricture, converting the case into one of ruptured perineum. If the obstruction were higher up this would not be the proper plan to pursue, but it will be applicable to the case before us. After performing the usual operation for the cure of ruptured perineum, a self-retaining catheter should be introduced, a matter of great importance, not only to your patient, but yourself, for it is a very difficult and annoying thing to catheterize these patients. The food given should be light, and should consist of beef-tea and broth in preference to milk, which makes hard fæces. She may have a soft-boiled egg on the third day.

NOTE.—On June 1st Dr. Goodell performed the operation as described, after forcibly stretching open the strictured portion of the gut. The result was perfect union at all portions of the wound and the obliteration of the fistula.

Neurasthenia.

CASE 2.—This girl is seventeen years old. Her monthlies began at the age of thirteen, and were free from pain until three months ago, when her trouble began. She lives at home and goes to school: she says that for several months she has had dizziness of the head, and that now she suffers from backache, headache, and cold hands and feet. This is an example of a history you will often meet with. A girl who entered puberty in blooming health and without an ache finds that, in two or three years, her health begins to fail. Her appetite is lost and she grows pale and weak; she has cold feet, blue finger nails, and complains of all manner of pain—headache, backache, spine-ache, and a general oppressive sense of exhaustion. Her catamenia, hitherto without suffering, now begin to annoy her more and more, until they become painful in the extreme. She has an exhausting leucorrhœa, and bladder troubles soon set in. The slightest mental or physical exertion is wearisome beyond measure; life becomes a burden to her and she becomes hysterical.

Now what is the meaning of all these symptoms—the headache, the backache, and the dysmenorrhœa? The meaning is, either that she has over-studied or that she has suffered from some disappointment. The yet developing nerve-centres of this over-taxed girl were unable to cope with the strain thrown upon them and they broke down. The jaded nerves made poor blood and faulty circulation, and from this arose the cerebral and spinal irritation and the general exhaustion of the system. Such a case comes to us to-day; she is intensely neurotic; hyperæsthetic to the last degree. We can take her away from her studies and in titute what is known as the "Rest Cure;" but if there is any heart trouble here, if there has been any love disappointment, the treatment may fail.

Upon introducing a sound into the uterus, I find that the womb is in its natural position, but the instrument passes in three inches; there is doubtless some little congestive enlargement of

the organ. I think there is also a slight erosion of the mouth of the womb. The commonest mistake in gynecology is that of mistaking a laceration of the cervix for an ulceration; the next most frequent mistake is in treating young women, locally, for uterine disease, when all their troubles arise from emotional or constitutional causes. Your buxom, ruddy country-girl comes to a city school; she is ambitious and studies hard, but does not get the fresh air she has been accustomed to; she has, after a year or two, cold feet and clammy hands, dysmenorrhœa, leucorrhœa, and that inevitable backache. I believe that out of the sixty-five thousand physicians in this country sixty-four thousand would call it a disease of the womb, attributing all her troubles to the uterine disorder, and treat her accordingly. Dr. A finds what he calls an ulceration, and treats it by the most approved methods, but the patient gets no better. Dr. B discovers some displacement of the uterus, an anteversion most likely, which every virgin has, and he puts in a pessary; but she still unaccountably persists in staying ill. Dr. C calls it congestion of the womb, and she is subjected to a painful, an unnerving and a humiliating local treatment, without any benefit whatever. Unimproved, she becomes hysterical; she drags herself from one consulting room to another, getting drugged, and douched, and cauterized, and pessaried, until finally, in despair, she settles down to a sofa in a darkened room, and lapses into hopeless invalidism.

It is for just such cases as these that Dr. S. Weir Mitchell,* of this city, has devised a way of cure, and I know it to be the best, for I have tried it over and over again, with great success. The patient is kept strictly in seclusion for several weeks, and during this time she sees no one but her nurse and attending physician; absolute rest is enforced, and massage, electricity and feeding constitute the treatment. The results of such a course of treatment are simply marvelous. These patients gain flesh; they begin to sleep soundly from eight to ten hours every night; the dysmenorrhœa disappears and their appetite develops to an astonishing degree.

These hysterical cases show a marked lack of nerve coördination. We are made up of halves; our organism is a twofold one. When we destroy the equilibrium between opposing parts we have non-coördination. The "nervousness" that we speak of is a certain non-coördination, a mal-nutrition of the nerve centres, followed by disturbances of the circulation from the weakened innervation. These secondary disturbances consist of local anæmias and hyperæmias. There will be sudden ebbs and flows of impoverished blood in the various vital organs, and we may see in the same person, and starting from one cause, alternations of anæmia and of hyperæmia of the brain, stomach or spine, with very generally stable hyperæmia of the reproductive organs. The cerebral exhaustion or irritation manifests itself by wakefulness and heaviness, by asthenopia, and an inability to read, or to write, or concentrate the thoughts on any given subject; the exhaustion of the stomach, by flatulency, nausea

* "Fat and Blood and How to Make Them." Phila., 1877.

or gastralgia and capricious appetite; the spinal exhaustion, by tender spots, the backache and general weariness. The anæmia of the reproductive organs is exhibited by amenorrhœa, or by scant menstruation and by neuralgic or hysterical pains; the hyperæmia, by congestion, dysmenorrhœa, menorrhagia and leucorrhœa, by uterine flexions and dislocations, and by a variety of subjective and objective phenomena with which you will become familiar.

But this girl cannot afford to take the rest-cure, so I shall do the next best thing; I shall try to give her good, thick blood, and feed up the nerve-centres. She will take Bland's pill, which, as you are aware, is made up of equal parts, two and a half grains, of the dried sulphate of iron and the pure carbonate of potassium. During the first three days, one pill is to be taken after each meal. On the fourth day, four pills are taken during the day. On the fifth day, five pills; on the sixth day, six—that is to say, two pills after each meal. For three days more six pills are taken daily; then the dose is increased by one pill daily until five pills are taken after each meal, and the patient receives $37\frac{1}{2}$ grains of the sulphate of iron in the twenty-four hours. For her bowels, which are costive, I shall order an occasional Lady Webster pill. She will also take malt, and a good rest every afternoon.

Amenorrhœa, or irregularity of menstruation, is extremely common at this period of life. Indeed, I have been repeatedly asked by ladies in this city, and in other cities, if, in the female boarding schools, drugs are not secretly given to the girls, in order to check the menstrual flow and save the labor of the laundry! Why! there is no drug that will stop it. I wish there were, for I have often been put to my wits' end in cases of menorrhagia. A physician, even, on one occasion wrote to me about some of his patients who had come home from the same school with much knowledge but no menstruation, and asked, "Is it possible that some drug has been secretly given to these girls, to lessen the washing?" The true key to the mystery is found in the modern system of over-teaching, of over-studying. If the mental strain of study will do it, what shall we say of the mental strain of love—the most powerful of all emotions?

MEDICAL SOCIETIES.

THE BRITISH MEDICAL ASSOCIATION.

Our report of the Forty-ninth Annual Meeting of this Association has been long in hand, the International Medical Congress having taken precedence of it. The meeting was held at Ryde, August 9th, 10th and 11th. After the presidential address by Mr. Barrow, Mr. Fowler, the general secretary, read the annual report of the Council, which stated, among other things, that the roll of members now reached 9202, and that the next meeting would take place at Worcester, 1882 being the jubilee year of the Association, and Worcester the town where it was first started by Sir Charles Hastings. The last passage of the report ran as follows: In conclusion, your council congratulate you that, whether in point

of members, earnest and effectual scientific work, public influence, journalistic efficiency, or material prosperity, as tested by its balance sheet, the British Medical Association has never held a more commanding position.

Little general business of importance was transacted at the meeting. The opening addresses are discussed elsewhere. The sections were, however, active, and we make the following selections and abstracts from the papers and discussions presented before them:—

Section on Medicine.

Dr. R. S. Smith presented a paper on

CODEIA IN THE TREATMENT OF DIABETES.

Dr. Smith said that opium had been empirically used in the treatment of diabetes, from the time of *Ætius*. In recent times the action of the drug had been investigated by Pavy and others, with the result of showing the practice to be the result of well-established experience; and observers had endeavored to ascertain to which of the alkaloids of opium the beneficial result was due. Codeia was first recommended by Pavy, on the ground that it could be given in large doses without producing drowsiness. Of late it had been much used, as recommended by Dr. Saundby, in the cough of phthisis, where it gave great relief, and had an appreciable soporific effect. But it was in diabetes that codeia had been of greatest service. As regards the dose, small doses were recommended by some authors, but Dr. Brunton stated that it might be given in doses of a quarter to half a grain three times a day at first, the medicine being increased gradually until sugar disappeared from the urine, or increasing drowsiness demanded its discontinuance. Dr. Pavy had given a series of cases in *Guy's Hospital Reports*, showing the beneficial effects of opium, morphia, and codeia in removing sugar from the urine; the advantages of codeia being that it did not produce the same narcotic effect as opium and morphia. Opium was given in doses up to nine grains, morphia up to three grains, and codeia up to ten grains three times a day. Dr. Cavafy had given fifteen grains thrice daily, with good result. Dr. Smith considered that alkalies and all other treatment, even dieting, were inferior to codeia as remedies for diabetes; and that in this disease it might be considered almost a specific, and should be the first remedy tried, and should be given in fairly large doses until some physiological effect was produced. Codeia had been said to produce convulsions; but the literature of the subject did not support this, and he had never seen any such effect. He related three cases, which all exhibited marked improvement while taking codeia, which improvement ceased when the codeia was withheld, and was renewed on its repetition. Morphia had a good effect in two of the cases, but the improvement was much less marked than with codeia.

In a discussion on

RECTAL ALIMENTATION,

Mr. De Berdt Hovell (London) said that twenty-two years since he recovered, by nutrient enemata, a person suffering from diphtheria, who had taken nothing for fifteen days; and he knew of

cases of diphtheria that had been lost, from the want, in his opinion, of that useful remedy. Stricture of the œsophagus was another disease in which it might be most beneficially used. He agreed that it should be adopted as a means of treatment in other diseases. It had often occurred to him that, in typhoid fever, injections into the rectum might be used beneficially, if used with care, on the hydrostatic principle, and not by the syringe. If the bowel were simply washed out, it might not only be the means of nourishing the patient, but also of improving the process of cure. In regard to the intervals for administering the enemata, he thought two or three hours much too frequent, at any rate, for any length of time together. In many cases, the bowel was too irritable to retain the nutrient injection, and great care should be taken that it was not given so frequently as to produce or increase irritation. Three or four times a day were, he thought, sufficient.

DISCUSSION ON ACUTE SPINAL PARALYSIS.

Dr. Gowers (London), in opening the discussion on this subject, remarked that he could best fulfill the task entrusted to him by pointing out those points on which the comparison of the experience of many observers is most likely to add to our knowledge. One of these was the question of the influence of hereditary tendency to nervous affections, which, although small, is sometimes effective. The remarkable frequency of the affection in young children was altogether unexplained, and was remarkable, since other acute inflammations of the nerve-tissues (as distinguished from the meninges) were not common in them. In regard to its occurrence at other ages, an instance in which it came on in an old man aged seventy was mentioned. The influence of dentition was less certain than that of cold, in causing the disease; but even the latter had probably been exaggerated. Sinkler's statements as to the relation to season were mentioned, and a comparison of facts regarding the point on a large scale was suggested. Among the symptoms, the equivocal character of the onset, simulating an acute specific disease in the child, acute rheumatism in the adult, deserved discussion; and in connection with it, the question of the relation of the affection to other acute diseases. This relation had certainly been exaggerated, owing to errors in diagnosis; and the only disease to which a relation seemed well established was typhoid fever. Of this two instances were mentioned. Early electrical examination (*i. e.*, at the end of a week) was urged as of great importance, both as regards diagnosis and treatment, and, properly effected with faradization only, involved no risk. An illustrative case was mentioned. The importance of the scientific study of these cases, as regards the representation of movements in the cord, was illustrated by the different pathological association of the two parts of the pectoralis major. The occasional but rare occurrence of spinal degeneration in adults who had suffered from infantile paralysis is a point on which further facts are needed. Two cases were mentioned. In treatment, several questions were raised as deserving discussion.

Early treatment should be directed to the character of the lesion, rather than to the tissue in which it occurs. Of later treatment, the value of time and method of electrical applications were especially discussed.

In regard to the

TREATMENT OF INSANITY.

Dr. J. Groves stated that in the majority of cases there was a definite history of some special cause of exhaustion, which, coöperating with instability and infirmity of nerve element, inherited or acquired, produced insanity. There were usually anæmia, with or without evidences of blood-stasis, and sleeplessness. The cells of the mind centres were exhausted, and repair could not take place without rest, and until the condition of the circulation was remedied and the quality of the blood improved. Rest might be secured by moral or by medical treatment. Moral treatment aimed at breaking through the self-absorption and exaggerated egotism almost always present by diverting the attention, and thus giving rest to the centres. The choice of various sedatives and hypnotics to tranquilize or procure sleep would be decided by individual experience, but they were, at best, necessary evils, to be rarely used, and only after other means had failed. But the phenomena exhibited in many cases of insanity pointed to abnormal and irregular vaso-motor action, owing possibly to impulses from the deranged higher centres, or to insanity of the vaso motor centres themselves, from inherent instability or from defective nutrition, due to impoverished blood, or to blood contaminated by the waste products of the system. The remedy must be found in the blood itself. How best to minister to the nutrition of the blood and to improve its qualities might be a matter of individual opinion. Good food might not be sufficient, for it might not be properly assimilated; and, perhaps, cod-liver oil and iron, alone or with arsenic, in small doses and long continued, offered the best prospect of success. The various organs, especially the bowels, should be kept active. Milk might enter largely into the diet in many cases, and abundant out-of-door exercise was essential in most. It was of paramount importance that appropriate treatment of mental diseases be applied early, and that it be pursued with perseverance and patience. For the most part the treatment of insanity in its earlier stages, when it was most likely to be successful, fell to the lot of the general practitioner, who, notwithstanding the very evident neuroses of different members of the patient's family, often came too hastily to the conclusion that he had to deal with an incurable disease. It was of the highest importance, therefore, he should be practically acquainted with unsoundness of mind in its various forms.

On the subject of

JAUNDICE,

Dr. Lauder Brunton delivered a long address, mainly discussing the theories of the disease, in which he did not seem to gain the general assent of his hearers. Questioned as to some points of treatment, he replied that he had asked what doses of ipecacuanha were used. He had himself had no experience of the use of ipecacu-

anha in jaundice.* In fact, it was only a month or two since he learned of it, and he had had no cases directly under his treatment since. Dr. Ewart had mentioned that a quarter of a grain to a grain was used in India. It depended upon the nausea. Lately, also, Dr. Hook, of Bombay, recommended it in very large doses, in the same way as for dysentery. He gave a sixth of a grain of morphia beforehand, and then thirty grains of ipecacuanha half an hour afterward, as a bolus; and he had found cases of jaundice improve very satisfactorily in a very short time, and one case in twenty-four hours that had resisted other treatment. The other plan of treatment was that of continued small doses. Then, in regard to the action of euonymin, he had not tried it in jaundice, but in other cases of intermittent liver disorder in consequence of malaria, in men who had been out in India, say, three grains of euonymin, made up into a pill, every second or third night, followed by a little Carlsbad water in the morning. Usually he told his patients to take a large draught of the water in the morning after the pill, and on the other mornings the same quantity of water taken in small sips as they did at Carlsbad, so that a tumblersful should last them till they had finished dressing—the water to be previously heated to the warmth of warm tea, so that they could comfortably sip it. This combination of euonymin with Carlsbad water gave very good results indeed in these cases of biliary disorder depending upon chronic malarious poison.

IS ANTIPYRETIC TREATMENT JUSTIFIABLE?

In this paper Dr. John Haddon said that in health the normal temperature of the body is maintained when exposed to either extreme heat or cold. In disease the equilibrium is lost, and as a rule the temperature is raised when pyrexia is said to exist. In Germany the pyrexia is believed to be the cause of the changes which cause death in fevers. On this theory the antipyretic treatment has been adopted, which consists in placing the patient in a cold bath to reduce his temperature by the direct abstraction of heat. He believed such treatment not to be justifiable, for the following reasons: 1. The theory is incorrect. *a.* This is proved by the fact that many cases are on record in which the temperature was much higher continuously than the advocates of this theory believe to be certainly fatal, and still all the bodily functions were healed, and recovery followed. *b.* We find that a temperature which in one disease is regarded as almost certainly fatal, is by no means of such serious import in another. *c.* In the same disease one frequently sees the identical symptoms as severe in conjunction with a low temperature as with a high one. 2. It is dangerous. To be assured of this it is necessary only to read the reports of those who have tried the treatment, which affirm that collapse and failure of the heart's action are produced. The treatment of fevers by drugs, such as quinine, cannot properly be called antipyretic, but would be more correctly termed febrifuge, seeing that their action

* The value of ipecacuanha in torpidity and functional derangements of the liver has been known for years to all readers of *NATURE'S Medical Therapeutics*, where it is given a prominent position.

is more obscure, and certainly more general, than that of a cold bath. Cold affusion, as practiced by Dr. Currie, appears to effect "the solution of fever" by the shock it gives to the system. It is more easily used than the bath, and no danger attends it; and, though it does not reduce the temperature so much as the cold bath, it seems more worthy of our attention, and it is probable that any good that results from a cold bath is caused by the shock during the act of immersion.

Section on Surgery.

Among the articles presented before this section we mention one entitled

A NEW AND RELIABLE OPERATION FOR THE CURE OF WEB FINGERS, ETC.,

by A. T. Norton, F.R.C.S., London. The operation consists of cutting small flaps or tongues of skin from the posterior and anterior surfaces of the hand, with the bases of the tongues on a level with the heads of the metacarpal bones, and of attaching them together by their apices after cutting through the web. The flaps unite by the first intention, and thus any re-development of the web is entirely prevented. The points to be considered in the performance of the operation, in order to insure a good result, are the following: 1. The flaps should be cut thick, so that their vascular supply may be complete, and the chance of sloughing reduced to a minimum. 2. They should be cut rather narrow, with judgment, otherwise they become compressed laterally and bulge upward at the margins, instead of lying in adaptation to adjacent tissue. Such compression, of course, interferes with a free circulation of blood through the flaps. 3. The tissue between the knuckles should be cut back, or, if necessary, cut away, so that the apices of the flaps may lie well in contact with each other, without tension. 4. The flaps must be of sufficient length to prevent tension when the suture is applied. 5. The apices of the flaps are very small in children, so that a very small needle should be selected to carry the suture, in order to avoid unnecessary injury of the flap. 6. The position of the flaps should be carefully arranged, so that the limit of the new web may be in the line with the natural web of the finger. If the flaps unite, no web can re-form. There is no reason whatever why union by the first intention should not take place, if attention be paid to the above recommendations; and thus one of the most troublesome and unsuccessful of operations is converted into one most simple and most certain of success.

ON THE TREATMENT OF STRICTURE BY STRETCHING.

Reginald Harrison, F.R.C.S. Liverpool, advocated the employment of stretching in certain cases of tight stricture of the urethra, where retention had occurred and catheterism was difficult. In using the phrase "stricture stretching," as best describing the object in view, he did not advocate a new instrument or a new method of treatment; it was to the application of well-recognized principles that he wished to draw attention. Dr. Otis, of New York, had demonstrated the extent to which the urethra was capable of being dilated, and what was true of the healthy canal would be found to apply, though in a less

degree, to the strictured one. The dilator employed by Mr. Harrison was Holt's, with some special adaptations which had been made by Messrs. Krohne and Sessemann. In the first place there was attached to it a pilot bougie, which, in cases of tight or tortuous strictures, was invaluable. The number of dilating rods was increased to eight, so that the process of stretching might be gradual; and, in order that there might be no jerking as the several rods were introduced, a spiral spring controlled the separation of the instrument, instead of a screw. The size of the dilator was No. 3 English gauge; the largest rod brought it up to rather over 12, and between these two extremes there were seven gradations. The patient being placed under ether, the dilator was passed fairly into the bladder, and then the several rods were slowly introduced until dilatation was completed. When this was done a catheter was used, and all urine removed. A full-sized bougie was then passed every third or fourth day until the patient had learned how to do it himself, when he must be enjoined to continue the practice. In conclusion the author remarked that he was not recommending this as a panacea, nor as prejudicing other operations to which reference had been made, but as a safe and efficient expedient for meeting immediate difficulties and simplifying future treatment. If, in all cases of retention occurring with tight stricture, the use of this or a similar instrument followed upon catheterism, both patient and practitioner would be none the worse for the knowledge that, whatever spasm might temporarily do, at all events there was a way to the bladder, capable of admitting a No. 12 bougie, which had been made without any structural detriment. Mr. McNamara, of London, thought that the operation could be applicable to only a few cases, and spoke strongly of the advantages of the old operation of gradual dilatation, the cures after which were often permanent.

A FURTHER SERIES OF CASES OF IMMEDIATE CURE OF INGUINAL HERNIA.

W. Dannett Spanton, M. R. C. S., Hanley, related nine additional cases in which his operation for immediate cure of hernia had been performed, making a total of thirty-four cases. Of these, thirty had been quite successful, and the remaining four much benefited. There had been no death. In some of the patients, no truss had been of the slightest use. A tendon or catgut ligature was employed in three of the cases, passed in a similar manner to the screw, and retained *in situ* until the parts became consolidated. The result in these cases was found to be on the whole less satisfactory than in those treated by the screw alone. In them, however, the beneficial influence of Listerism was most marked, and the author advised its use in every such operation in which an animal ligature was employed. The paper concluded with an appeal to surgeons to give the operation for radical cure a fair trial, and not to rest satisfied with recommending the mere use of trusses; more especially to urge parents, in the case of young children, to have them cured while young by some operation which had been proved to be both safe and effectual.

EXCISION OF THE KNEE IN CHILDREN.

This was discussed by Mr. Stokes, of Dublin. The usual disease in which it was indicated was acrofulous synovitis. In these cases expectant treatment was vain. If the disease had extensively engaged the other structures of the joint, and caries also were perhaps present, the chances of success after resection were largely diminished; and, although the wound might heal without suppuration, and the results appear admirable when the patient left the hospital, yet he had seen examples of return of caries ten or twelve months afterwards, leading to abscesses, and the necessity for amputation. This course of events he had not witnessed when the operation was undertaken at an early stage of the development of the disease. He dissented altogether from the view that, in these cases, the requirements of resection were fulfilled by incision, injection, and drainage of the joint; for, even if the well-known risks of suppuration of the joint were perchance avoided by this plan of procedure, was the ultimate condition, he asked, a better one than it would have been had a resection been performed? He thought not; nor did his experience lead him to agree with the opinion of those who saw an objection to resection in subsequent atrophy or shortening of the limb. The explanation of this lay in the very fact that the operation was done at an early stage of the disease, when it was necessary to remove only a very thin slice of the articular ends of the bones, and the osteogenetic function of the epiphysis was therefore practically not interfered with. In none of the cases which suggested his remarks had he seen either atrophy or deformity. He referred to the faulty methods of dressing formerly in use, and even now not altogether abandoned, after excision, and described that which he himself employed. Listerian precautions were invariably followed, and the limb fixed at absolute rest, by two metallic splints, one applied on the anterior and the other on the posterior surface of the limb, and retained there by gypsum bandages. The absolute immobility thus secured conduced to the early healing of the wound, and he rarely found more than three or four dressings necessary. He alluded to an accident met with in two or three cases, namely, hemorrhage coming on some hours after the operation, not from any visible vessel, but from the cut surfaces of the hyperæmic bones. He thought it possible that this might be due to the use of the elastic bandage, and referred to the experience of the Leeds surgeons, who, he learned, had met with the same occasional accident, and who had abandoned the use of the elastic bandage.

ANTISEPTIC INCISION AND DRAINAGE IN EMPYEMA.

F. Richardson Cross, M.D. Clifton, Bristol, said that all fluid effusions into the pleura required to be early removed. Full re-expansion of the lung was the aim of treatment; but by prolonged compression the lung was crushed; and by continuous irritation the pleura tended to thicken and form false adhesions, which permanently bound down the affected lung. Every day that the effusion remained the danger was increased; and when medical treatment of two or

three weeks had been of no avail, the fluid should be partially, at least, removed. Absorption frequently followed partial removal. In cases of sero-fibrinous exudation no great danger threatened from putrefaction; but, as the fluid could not be accurately determined before withdrawal, it should be assumed to be putrescible, and all causes of putrefaction should be excluded. Aspiration removed pressure-risks and dyspnoea in all cases; and, if done carefully, produced no ill result except pain, while many cases of pleuritis were put towards recovery. If, however, the fluid were pus, special measures must be taken for its entire removal. A permanent opening at a dependent part of the thorax, with satisfactory drainage, was essential. Clinical experience abundantly proved this necessity for free continuous drainage; it also showed the great risk of admitting to the pus agents that might decompose it and render it fetid. An early operation, with dependent opening, free continuous drainage, and the reliable antiseptic method of Professor Lister, should result in a complete cure. Cases of long standing compression of lung would hardly result in its complete re-expansion; but the general health of the patient would recover itself, with more or less contraction of the chest and impaired breathing. The same system of treatment, with antiseptic or stimulating injections in place of precautions intended to exclude from the first septic influences, should cure most cases of old-standing pleural fistula; and, in a few obstinate cases, drainage and the approximation of the pleural surfaces would be encouraged by resection of a portion of one or more ribs. Three cases of cure—two perfect, one with contracted thorax, otherwise excellent—were related.

A NOVEL TREATMENT OF SYNOVITIS.

H. A. Martin, M.D., Boston, said his object was to show that "enlargement of joints, from whatever cause arising," could be cured by evacuation of the sac by aspiration, and the subsequent wearing of the pure India-rubber bandage which he had introduced for the treatment of ulcers of the leg. He had treated hundreds of cases by these means, and he had no hesitation in saying that it was the only treatment which ought to be adopted in cases of synovitis.

ON THE EARLY RECOGNITION AND TREATMENT OF SPINAL CARIES.

Mr. Edmund Owen, F.R.C.S., London, opened this discussion. He remarked that the affected spine too frequently received no offer of therapeutic aid until its pathological bankruptcy was declared; whereas judicious assistance afforded at the proper time might have spared a shameful collapse. It was lamentable to think that angular curvature should have come to express spinal disease, when surely this deformity was the one sign of spinal disease which our treatment should aim at precluding. He instituted a comparison between the various stages of advancing knee-joint disease and advancing spinal disease, and pointed out in detail the symptoms which were as clearly indicative of early spinal caries before deformity had arisen as were the too familiar symptoms of early joint disease. The patient must be watched in all his movements, and careful inquiry must be made into his habits, to learn if there had been any change therein; nor must it be imagined that the child had lost its usual agility and delight in childish pleasures simply because he had "growing pains" or "rheumatism." There was urgent necessity to give heed to these little matters, which were full of indication and suggestion. They were the straws which showed the direction of the on-coming breeze; when the pathological storm was raging, almost any one could read the weather. We must never refuse to listen to, and search out the cause of, the child's oft-repeated complaint; it must be stripped stark naked, and examined, if need be, on several occasions. As to treatment, the best, he considered, was absolute rest on the back, on a firm, flat, horse-hair mattress, without a pillow. Taken thus at the onset, a few weeks' rest might make the surgeon wonder if his early opinion were correct; if so, so much the better. If the case required longer treatment, then he knew of no better splinting than that afforded by a Sayre's jacket, in the application of which no suspension need be used; but on this he insisted, that if a jacket be put on a child with early spinal disease, the child must still be kept in bed, to insure absolute rest.

(To be continued.)

EDITORIAL DEPARTMENT.

PERISCOPE.

Treatment of Gonorrhoea by Injections of Sulphurous Acid Diluted With Water.

Dr. W. D. Wilson writes to the *Lancet* :—

For some time I have treated all cases of gonorrhoea with injections of sulphurous acid diluted with water, and as the results in my hands have been very satisfactory, I write in the hope that others may be induced to give this method a trial.

I do not offer any theory on the subject; I sim-

ply state the fact that I have now treated sixteen cases of gonorrhoea, using no other medicine, and they all returned to duty in an average of six days. I have not observed a relapse or any bad effect. The majority of the cases were second attacks, but those suffering from primary attacks of the disease recovered equally fast.

When I commenced this method of treatment I used much stronger injections than I do at present. I find sulphurous acid one part to fifteen of water quite strong enough for most cases. The rules of treatment I recommend are: Place the patient on a low diet, and administer injec-

tions of sulphurous acid diluted in water one to fifteen, three times a day, no other treatment being necessary. I find it is necessary for the attendant to give the injections, for if it is done by the patient it is never well done, most of the fluid escaping back outside the nozzle of the syringe. The injection should be kept in the urethra from three to five minutes. If the patient complains of much pain, or if there is a tendency to chordee, it will then be sufficient to administer the injections once or twice in twenty-four hours.

If these instructions are strictly followed, the purulent discharge will become scanty at the end of the first day, and on the third it will be replaced by a thin, gleet discharge, which also disappears in a couple of days. While this watery discharge lasts I usually administer only one injection daily. I find that the first injection frequently causes pain, which is not so much complained of afterward. I, therefore, in a few cases give the first injection very much diluted—one in twenty, afterwards using one in fifteen. It is necessary to see that the sulphurous acid is fresh and good before it is diluted to the required strength.

The Treatment of Compound Fracture.

In a paper translated in the *London Medical Record*, from the *Wien. Med. Woch.*, No. 10, 1881, Prof. E. von Bergmann states that, in his treatment of penetrating fracture, he deviates from the rules that have been laid down by Volkmann for the management of open fractures in general. Penetrating fracture, by which is meant that form of fracture in which the skin is perforated at one small spot only by the sharp extremity of a fragment of bone, was to be distinguished from open fracture, even before the time of strict antiseptic dressing of wounds; since in the former injury the prognosis has always been far more favorable than that of the latter, in consequence of the smaller size of the wound, and of the less extensive contusion of the soft parts. In dealing with such cases, even when brought to him before the commencement of traumatic local reaction, Dr. von Bergmann does not dilate the wound and endeavor to establish primary disinfection of the injured structures. He restricts his action to careful cleansing, by solution of carbolic acid, of the surface of the injured limb, and to washing out the small wound and removing blood clot. The whole of the limb is then enclosed in salicylic wadding, compressed by an elastic bandage, and finally fixed in a plaster-of-Paris splint. In all of eight cases thus treated, the author obtained good results; although in half of these instances the bone had protruded through the wound, and could not be reduced without some difficulty. In some of the cases there was much laceration of the soft parts, with swelling of the limb and considerable extravasation. In cases of compound fracture with large and gaping wound, the author follows Volkmann's practice of attempting primary disinfection; but this he does with great care, as he does not consider that this practice is absolutely free from bad results. This is indicated by those cases in which

amputation has to be performed in consequence of phlegmon about the seat of fracture, which cases, even when terminating favorably, prove, at least, failure of the antiseptic treatment. The author has, moreover, observed one case of fatal septicæmia after such treatment of compound fracture. He is convinced that thorough disinfection cannot be established without risk; and for this reason he thinks that, in the treatment of penetrating fracture, it is well to retain the advantage of having but a small wound to deal with. Much importance is attached, in such cases, to compression of the limb by elastic bandaging, which, as it is applied over wadding, is not likely to do harm. The absorption of extravasated blood is thus much accelerated, and the danger of decomposition much diminished. The most important advantage of elastic compression in cases of compound fracture consists, according to the author, in its favoring the reunion of detached fragments of bone. That such reunion does take place, he has proved both by pathological specimens from man and by experiments on animals.

Gonorrheal Rheumatism.

Dr. A. W. Foot, says, in the *Dublin Journal of Medical Science*:—

The characters which rheumatism modified by gonorrhœa presents are the following:—There is usually less febrile distress; the articular pain is not so severe nor acute; the integument covering the affected joint is apt to retain its normal color; there may be but one joint, and there are not generally many, implicated; the inflammation is confined to the synovial membrane; the eye (sclerotic coat), unlike what happens in ordinary acute rheumatic fever, is often attacked. But the most significant of all signs is finding a running from the urethra, which diminishes when the gonorrheal rheumatism sets in, but which does not cease.

Sir Astley Cooper has given a good account of this affection in his lectures, and says it is not an infrequent disease. There are different ways of explaining the occurrence of joint inflammation in connection with gonorrhœa; some think it merely a coincidence. To this it may well be objected that females seldom suffer from this form of rheumatism. Others hold that it is balsam of copaiva which produces the joint affection. I think the most rational and scientific way of accounting for it is that of Mr. Wilks, who believes that gonorrheal rheumatism is usually a subacute form of a pyæmic inflammation. He considers it analogous to *scarlatinal* rheumatism, which is often nothing less than severe pyæmia, traceable to purulent infection from the sores in the throat, and also comparable to *puerperal* rheumatism, and to the form that sometimes follows smallpox. In support of the pyæmic origin of gonorrheal rheumatism Wilks refers to two cases in which obscure fatal pyæmia proved to have for its cause a gonorrheal inflammation of the urethra, the evidence of this being the discovery of purulent inflammation of the prostatic plexus of veins, while the urethra was full of pus.

Senator considers the most probable explana-

tion is that the inflammatory irritation is gradually propagated from the urethra to the sacral plexus and the spinal cord, where it affects trophic nerve fibres. Gonorrhœal arthritis would thus be assimilated to those articular disorders which occur in diseases of the spinal marrow.

Gonorrhœal rheumatism is commonly situated in one knee joint. In addition to the peculiarities of gonorrhœal rheumatism before-mentioned it should be noticed that the profuse sweatings of ordinary acute rheumatism are not observed, nor are the serous membranes of the heart likely to be attacked, nor does the articular inflammation show any tendency to shift about capriciously or suddenly disappear.

The rarity of the disease in women may possibly be due to the circumstance that their vaginal and urethral mucous membranes (either of which may be affected by gonorrhœal inflammation) are thicker and more tough than the lining of the male urethra.

On Gall Stones.

In an article in the *Medical Press and Circular*, Dr. D. H. Cullimore writes:—

The causes that predispose to the formation of gall stones are: 1st. Old age, on account of the greater quantity of cholesterol in the blood. 2d. Protracted ill-health, when the bile, becoming stagnant, assumes an acid reaction, and is therefore less efficient in keeping the cholesterin, etc., in solution. The acidity of the bile, which is always increased by a meat diet, and never occurs under an exclusively vegetable diet, is an active agent in the decomposition of the chlorate of soda, the principal solvent of the matters—cholesterin, cholepyrrhin, etc., which go to make up the stricture of calculi. 3d. Good social position, from sedentary habits and luxurious dietary. 4th. Heredity. 5th. Atheromatous degeneration of the arteries. 6th. Diet. Meat diet in excess undoubtedly conduces to gall stones; but as to the influence of caloreficient food or alcohol, there is no reliable evidence. While on this point I may mention the injurious effect of a long-continued interval between meals, which, by resting the gall bladder, stops the flow of bile, and favors deposits. 7th. Sedentary habits, which accounts for its greater frequency (three to two) in the female than the male sex. Under this head is included confinement to bed on account of illness, fractures, and surgical operations. 8th. Bad hygienic conditions, as shown from the fact mentioned by Glisson, that cows which suffered from biliary calculi in winter, when fed in houses, got rid of them in summer, when put out to pasture. 9th. Anatomical changes in the liver and gall ducts, together with tumors, inflammation, cancer, etc., which, encroaching on the lumen of the ducts, help to cause the retention of bile. 10th, and last, and more frequently than all others, catarrh of the bladder and biliary passages.

This affection is, under all circumstances and in all countries, of an eminently chronic character. It is slow, equally in its dormant state as during its more active and varied manifestations. The usual result is recovery, either by expulsion of the calculi or their solution in the

bladder. They sometimes crumble away, and break up into *débris*, from a supposed destructive action of certain bacteria. They are most frequently expelled whole, even under the influence of so-called solvent remedies, as turpentine, ether, etc., whose action is probably more antispasmodic than chemical. Recovery is generally perfect, all stones being expelled, and when relapses recur we cannot be sure if all the original stones were got rid of. Now and again, however, we find ulceration, inflammatory obliteration of ducts, and other complications that lead to permanent jaundice and wasting, followed by death, after periods ranging from six months to two years.

Heat Eruptions.

In a communication to the *Atlanta Medical Register* (formerly the *Atlanta Medical and Surgical Journal*) for October, 1881, Dr. Geo. H. Rohe, of Baltimore, observes:—

For a number of summers past I have had to treat a class of skin troubles obviously depending upon the extreme heat. The clinical features of the eruption are those of simple "prickly heat," together with a number of painful boils scattered over the body. The eruptions, which occur indiscriminately in adults and in children, are most severe in individuals who perspire freely, and from the pain and excessive itching to which they give rise are very annoying. In some cases the affection bears a strong resemblance to certain of the cutaneous syphilides. In the case of a man who came to my clinic at the City Hospital a few days ago, the resemblance to a mixed papular, pustular and tubercular syphilide was so marked as to cause some hesitancy in making a diagnosis. What adds to the difficulty sometimes is that there may be a general glandular enlargement in these heat eruptions, just as in constitutional syphilis. I may remark that glandular enlargement is no more an absolute sign of syphilis than cough is an unfailing indication of pulmonary tuberculosis. I have, not rarely, seen children with pustular eczema of the scalp, whose disease had been diagnosed and treated as syphilis, for no other reason than that the post cervical and post-auricular glands were tumid and painful. It may be added that these errors of diagnosis are not always chargeable to the younger and less experienced members of the profession.

The treatment of the heat eruptions here noticed is simple. Cleanliness, light clothing and not too frequent cold bathing relieves the discomfort materially. The boils should be freely scarified, to relieve the hyperæmia, and give exit to any pus or slough they may contain. After bathing, the surface should be lightly dried by a soft towel, and dusted with a simple drying powder of starch or precipitated chalk. Poultices should be religiously abstained from. If any of the furuncular swellings should be very painful and tense, a hot fomentation after incision, continued for about an hour, will be as effective and much more cleanly than a poultice. Internally, the tincture of chloride of iron will, in most cases, be indicated.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—The *New England Medical Monthly* is one of the threatened new births for January, 1882. Dr. Wm. C. Wile, of Sandy Hook, Conn., announces himself as editor.

—A reprint from the *American Journal of Obstetrics and Diseases of Women and Children*, for July, 1881, contains a description of a new instrument for uterine dilation, invented by Dr. H. P. C. Wilson, of Baltimore. It consists of two blades, which are made to separate with a screw.

—That eminent sanitarian, Dr. Alfred Carpenter, read a valuable paper before the International Congress, on "The Utilization of Town Sewage by Surface Irrigation." (London: Office Brit. Med. Assoc.) He sums up the matter in nine propositions, and few would dispute his premises or conclusions.

—The *New Jersey Telephone* is the title of a monthly Masonic periodical, edited by William H. Jeffreys, 33°. The first number contains several articles on subjects connected with Masonry, and a poem by a lady, giving a most faithful description of the work at lodge, as well as of the surprise (if they have not already found it out) that the better halves of Masons some day will have in store for them.

—*Godey's Lady's Book* for October is exceptionally excellent in its entire get-up. The steel plate is a scene from Sir Walter Scott's "Tales of a Grandfather;" it is a real gem in its design and execution. A very clever novelette by Clara F. Guernsey, and a large array of well-written shorter stories, poems, and sketches, make the letter-press up to Godey's high standard. The fashion illustrations are new and numerous, and all the departments are worthy of commendation.

—As a writer on yellow fever, Dr. R. B. S. Hargis, of Pensacola, has been known for many years. His experience in the disease has been exceptionally great, and anything he says upon it is deserving of careful attention. Hence we would direct the attention of students to his essay on "Yellow Fever Recognition and Isolation," reprinted from the sixth volume of the *Transactions of the American Public Health Association*, and also to his "Open Letter to the National Board of Health," relating to the same topic.

—From Dr. Abel Gutierrez, of Nicaragua, we are in receipt of a complete and well prepared thesis on jaborandi, *Ensayo sobre la accion fisio-*

logica y terapeutica del Jaborandi. He reviews from all the recent sources the contributions to our knowledge of this important drug. He believes that its powers as a therapeutical agent are as yet by no means fully understood, and predicts for it a growing popularity with the profession. Dr. Gutierrez' thesis was prepared for obtaining the doctorate at the University of Guatemala, and in its completeness and neat presentation, gives the reader a favorable impression of the standard upheld by that ancient and renowned seat of learning.

—The subject of dengue fever is one of deep interest to many physicians in the south and southwest sections of our country. It is treated in a very instructive manner by Dr. James Christie, in a reprint from the *Glasgow Medical Journal*, entitled "On Epidemics of Dengue Fever, their Diffusion and Etiology," a paper read at the International Medical Congress. The name dengue, he tells us, belongs to the Swahili language of Zanzibar, and means any sudden, cramp-like seizure. Dr. Christie has seen dengue in its native home in Zanzibar. From his description we doubt if it is exactly the same disease as appears under that name in this country, although Dr. Christie is positive that West Indian dengue, at least, is the same. The question is an interesting one, and we commend it to the attention of our readers resident in districts where dengue prevails.

—Dr. R. J. Nunn, of Savannah, Ga., in a reprint from the *Transactions of the Georgia State Medical Association*, etc., discusses in energetic language the origin of the so prevalent diseases of women. As he tersely sums up his conclusions, we shall let him speak for himself:—

My effort in this paper has been to direct the attention of the profession especially to this subject, to the end that the errors constantly being committed in the physical training and development of young girls—either through ignorance, carelessness or design—may be brought frequently and forcibly to the attention of parents and others having charge of young persons, that a remedy may be found, and that some practical amelioration of these conditions may speedily result.

When it is considered that nearly all uterine distortions result from two causes—First, a weakness of the uterus and its supports, and, Secondly, a force, weak or strong, continued or intermittent, tending to pull or push the uterus out of its normal position—it seems that if we would diminish the number of sufferers from these diseases, we should first strike at the root of the evil, and endeavor to eliminate the causes which bring about certain conditions, which, again, have these diseases as their natural results. This should be some of the work of a true civilization.

BOOK NOTICES.

Health Officer's Annual Report of Births, Marriages and Deaths, for the City of Philadelphia, 1881. pp. 180.

Tabulated and compressed into the smallest possible space, this volume contains a vast amount of valuable information connected with vital statistics, epidemics, meteorology, etc. From a table giving the rate of mortality for the past twenty years, it appears that the same has been gradually though slowly decreasing. The increased death rate of 1880, as compared with the three preceding years, is more apparent than real, as the population of those years had been over estimated, yet there is no doubt but what there was a slight increase. The number of marriages during the year were 6476, or 7.64 per 1000 of population; the births (premature births and still-born excluded) numbered 19,388, or 22.88 per 1000; the number of deaths amounted to 17,711, or 20.91 per 1000. Of still-births (at full term), 870 were returned, and of premature births, only 231. The causes of death in their relation to age and sex, and also to meteorology, are carefully given, and the more important compared with those of previous years. The volume is accompanied by an excellent map of the city, and in every other respect well gotten up and strongly bound in cloth, while the arrangement of its contents reflects great credit on its compiler.

Refraction of the Eye, its Diagnosis and the Correction of its Errors, with Chapter on Keratotomy. By A. Stanford Morton, M.B., F.R.C.S. Ed. Senior Assistant Surgeon, Royal South London Ophthalmic Hospital. Small 8vo, pp. 57. Price \$1.00. Philadelphia: Presley Blakiston, 1012 Walnut street. 1881.

Having become a recognized fact that many heretofore obscure and intractable nervous disorders are due to abnormal refraction of the eye, and therefore readily cured by the use of glasses correcting the same, every physician should be familiar with the methods of examining and prescribing for such cases. By a careful study of Morton's little book no one can fail to acquire the necessary knowledge and skill in this important branch of diagnosis and therapeutics, but as in the several excellent works on ophthalmology, a copy of one of which should be found in the library of every general practitioner, the art of prescribing spectacles receives full attention, it is a question whether there is any real need for such a monograph. We also doubt whether the dioptric system of measurement adopted by the author is any real improvement on the old and well-known measurement by

inches. The latter would certainly have been preferred by most American practitioners, except, perhaps, by a few of the junior members of the profession. This has evidently been anticipated by the author, as he also gives the corresponding measurements in English inches, inclosed in brackets, for the convenience of those who prefer it. The work is well written, the rules laid down are brief and concise, and the explanations given simple and lucid.

The Compend of Chemistry. With which is included a Second and Revised Edition of the "First Steps in Chemical Principles." By Henry Leffmann, M.D., Member of the Society of Public Analysts of England; Lecturer on Toxicology at Jefferson Medical College; Demonstrator of Chemistry at Pennsylvania College of Dental Surgery. Philadelphia: C. C. Roberts & Co., 1118 Arch street. 1881. Cloth. Small 8vo, pp. 160. Price \$1.25.

Medical students frequently regard chemistry as a great bugbear, and its study is consequently very much neglected in many of our colleges. While it is not necessary that general practitioners should be accomplished chemists, they should, at least, be thoroughly familiar with the principles of chemistry, and in addition possess a sufficient knowledge of the nature and composition of such substances as are usually prescribed as medicines or taken as food, to enable them to prescribe intelligently and to perform the most important tests. Most of the text-books on chemistry are too voluminous and too complicated for beginners, who, for this very reason, often get disgusted, while if the subject was rendered plainer from the beginning, it would be one of the most attractive of the elementary branches of medical education. The work before us contains no more than every physician should know, and know well. The first twenty-eight pages, the author informs us in his preface, are a revised reprint of the "First Steps in Chemical Principles." This is the simplest and best introduction to the study of chemistry that we have ever seen. The next hundred and six pages are devoted to inorganic chemistry. Only the more important elements with their compounds are studied. The subject of organic chemistry occupies only twenty pages. The absence of illustrations would detract somewhat from the value of the book, if used without a teacher, but as a text-book for beginners, studying under proper instruction, it is all that can be desired, and any one who has mastered its contents thoroughly will find no difficulty in entering upon a more advanced course.

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THE ADDRESSES AT THE BRITISH MEDICAL ASSOCIATION.

The opening addresses of the general session and of the various sections of the British Association are interesting evidence of the current tendencies of professional thought and of medical progress. Usually they are upon some "topic of the time," in which not only members of the Association, but the whole medical world is interested.

The address of the President, Mr. BENJAMIN BARROW, F.R.C.S., touched lightly on a number of the issues of the day, such as temperance, vaccination, vivisection, lady doctors, compulsory reporting of disease, the sacredness of the profession, homœopathy, etc. He said in all this little or nothing that is worth quotation. We should judge that he is a highly respectable gentleman, who has never received or uttered a sentiment not endorsed by a large majority of his respectable colleagues; in other words, that he has never had an original nor accepted a novel idea.

Passing to the address in medicine, which was delivered by Dr. JOHN SYER BRISTOWE, whose work on *Practice* has passed to a second edition in this country, we find it entirely taken up with *homœopathy*. It is disappointingly trite. He goes over the old ground, and shows up the futilities of Hahnemannism in terms that must have been long familiar to his audience. Not a single new argument is advanced, and it is difficult to see why he chose this threadbare and barren topic, until one gets nearly to the end of his address. There, however, he had prepared a surprise for his hearers, which must have waked them up from the nap in which, no doubt, many of them were falling. These passages we quote:—

"Homœopathy is a protest against the best traditions of orthodox clinical medicine, and there is a natural tendency among us still to look upon homœopathic practitioners as knaves or fools. But surely this view is a wholly untenable one.

"That all homœopaths are honest men, is more than I would venture to assert; but that in large proportion they are honest, is entirely beyond dispute. It is quite impossible that a large sect should have arisen, homœopathic schools and hospitals have been established, periodicals devoted to homœopathic medicine be maintained, and a whole literature in relation to it have been created, if it were all merely to support a conscious imposture. No, gentlemen; the whole history of the movement and its present position are amply sufficient to prove that those, at any rate, who take the intellectual lead in it are men who believe in the doctrines they profess, and in their mission, and who practice their profession with as much honesty of purpose, and with as much confidence in their power to benefit their patients, as we do. That all homœopathic practitioners are men of ability and education, it would be absurd to maintain; but it is absolutely certain that many men of ability and learning are contained within their ranks."

* * * * *

"I ask you, gentlemen, to forbear with me if I push my arguments to their logical conclusion, and venture now to express an opinion which is opposed to the opinion which many, perhaps most, of you entertain. I do not ask you to agree with it; still less do I ask you to adopt it. But I ask you to consider it; and I am content to believe that, if it be just, it will ultimately prevail. It is that, where homœopaths are honest and well-informed, and legally qualified practitioners of medicine, they should be dealt with as if they were honest and well-informed and qualified. I shall not discuss the question whether we can, with propriety or with benefit to our patients, meet homœopaths in consultation. I could, however, I think, adduce strong reasons in favor of the morality of acting thus, and for the belief that good to the patient would generally ensue under such circumstances. I shall not consider

at length whether the dignity of the profession would be compromised by habitual dealing with homœopathists. But I may observe that it is more conducive to the maintenance of true dignity to treat with respect and consideration, and as if they were honest, those whose opinions differ from ours, than to make broad our phylacteries and enlarge the borders of our garments and wrap ourselves up, in regard to them, in Pharisaic pride. I appeal, gentlemen, in support of my contention, to other considerations. It has been held that to break down the barriers that at present separate us from the homœopathists would be to allow the poison of quackery to leaven the mass of orthodox medicine. But who that has any trust in his profession, any scientific instinct, any faith in the ultimate triumph of truth, can entertain any such fear? All the best physicians of old times, all the greatest names in medicine of the present day, are with us; all science is on our side; and we know that as a body we are honest seekers after truth. What have we to fear from homœopathy? Bigots are made martyrs by persecution; false sects acquire form and momentum and importance mainly through the opposition they provoke. When persecution ceases, would-be martyrs sink into insignificance; in the absence of the stimulus of active opposition, sects tend to undergo disintegration and to disappear. The rise and spread of homœopathy have been largely due to the strong antagonism it has evoked from the schools of orthodox medicine, and to the isolation which has thus been imposed on its disciples. If false, as we believe it to be, its doom will be sealed, when active antagonism and enforced isolation no longer raise it into fictitious importance. At any rate, breadth of view and liberality of conduct are the fitting characteristics of men of science."

This proposition, coming from a man of BRISTOWE'S position, was felt as a disagreeable shock by his hearers, and met with little if any countenance or support, either from them or from the writers in the English medical weeklies who discussed his address. The arguments against this plan are so familiar and withal so cogent, that we need not quote them.

No doubt it was the case of the distinguished patient, Benjamin Disraeli, first Earl of Beaconsfield, that stirred up the feelings of Dr. BRISTOWE, and led him to make a provision for the worst. And what would the worst be? Ah, the London fashionable practitioners have thought of it, but none have dared give this thought its expression. Removed from them by three thousand miles of inhospitable brine, we shall dare to do so. Just suppose that—horrors!—an H. R. H., or—a hundred horrors!—HER IMPERIAL MAJESTY, should see fit to call in

a homœopath—what would the physicians and surgeons in ordinary and extraordinary and extra-extra-ordinary, do? Could they meet him? Think of the general wreck of the code. Could they refuse to meet him? What, offend the august highness and majestic sereneness of the idol of loyalty? Impossible to contemplate it.

This terrible dilemma has also evidently given MR. JONATHAN HUTCHINSON some wakeful hours. He delivered the address in surgery, and, like all that he does, it is very well done. He points to the rapid progress of specialism, and how this is right and necessary; he referred to the qualifications of the medical practitioner and the increase in them, and turning his attention to Hahnemann, his teachings and his followers, spoke as follows:—

If, however, we may find theme for marvel in the presumptuous self-sufficiency of this would-be reformer, I do not think that we need seek far for the explanation of the success of his teaching. It inculcated faith in drugs, but it changed their form, and gave us cleanly globules and tasteless fluids for the bolus, pill and potion, then in vogue. It supplied a theory of cure, as well as its means; and to the intelligent, but, at the same time, not specially trained, its theory sounded at least as good as those of orthodox physic. The love of novelty conspired with a cheerful faith in the possibility of progress, and with delight in escape from the disagreeableness of the old methods, to draw converts to the new creed. Those converts were not the ignorant, nor were they the poor. No wonder that some from our own ranks should have thought they saw their interest in adopting the new method, and equally little that most of those who observed their conduct held the motives of the man who put "homœopath" on his door to be low and self-seeking. In nineteen cases out of twenty, probably the verdict was right; but when the fiat went forth that a homœopath must be either a fool or a knave, I doubt whether the modesty of nature was not somewhat overstepped. There are fools and fools; and we are guilty alike of unkindness and unfairness if we widen that disrespectful epithet over much, and apply it too freely. There is such a combination of weak power for the estimation of facts with enthusiastic optimism, as regards possible progress, which, while it in no degree establishes a claim to wisdom, yet scarcely brings its possessor into the category of fools. Among the laity, of those who became homœopaths, most were of this character, and some, probably, of those who seceded from our own ranks.

He goes on to say that a surgeon, at any rate, ought not to hesitate to meet a homœopathic practitioner of good standing in his own class,

and strongly hints that even a physician could, without derogation, do the same.

For ourselves, we regard both Mr. HUTCHINSON's and Dr. BRISTOWE's opinions on this matter as injurious, if carried out, to the cause of true medical progress, and we shall regret to see them endorsed by any journals or societies. We have sufficiently often, in these pages, stated why no benefit could come to the patient from such a hybrid consultation.

It is more agreeable to hear Mr. HUTCHINSON set forth the positive gains in remedial measures, in terse and clear language, as in the following paragraph:—

The chemist and the empirical seeker after new drugs may, I suppose, share the pleasure which must come from the knowledge of how iodide of potassium has made curable a whole phalanx of maladies before hopeless, and not the less full of misery because often accompanied by the bitterness of self reproach. The operating surgeon may remember the triumphs of ovariectomy, which has restored, in health, hundreds of mothers to their families. If we could bring together in one place those who, thanks to the ingenuity and industry of Von Gräfe, have been by iridectomy saved from blindness through glaucoma, and are now enjoying the blessing of sight, they would crowd this large hall, and leave no standing room. The abstruse optical researches of Young, Helmholtz, and Donders have borne fruit, in the fact that thousands all over the world, whose sight was comparatively useless, now enjoy it in almost full perfection. The purely practical man may rejoice in remembering how much Sayre's jacket and Martin's bandage have done, and are daily doing, for the mitigation of suffering and the cure of diseases which rendered life a burden. The application of the germ theory to the treatment of wounds has, I doubt not, had for one of its results, among many others, that at the present moment there live, scattered in very distant places, many thousands of able bodied men, the fathers of families, now earning their children's bread, who but for it would long ago have been in their graves. It is true that we as yet see no hope of a cure for cancer, but the pathological doctrine, which is rapidly gaining ground, that many forms are local, and that the pre-cancerous stage should be vigilantly recognized and vigorously treated, is already saving many from becoming its victims.

The address in Obstetric Medicine was by Dr. J. SINCLAIR COGHILL, who is Lecturer on Midwifery in the University of Edinburgh. He gave a carefully written synopsis of some of the recent advances in his specialty. We cannot give room for more than one quotation, which we select partly because it presents some new views, and

partly because of its bearing on "maternal impressions," which have been so much discussed of late in the REPORTER:—

"There has undoubtedly been latterly a great revival of the former view of the importance of the nervous system in relation to the functions of the other organic systems of the body. More extended researches in microscopic anatomy have greatly tended to this result. The terminations of the nerves have been traced much further than when I published my *Lectures on the Peripheral Nervous System*, in 1859. Klein, in this country, and Frankenhäuser, Kehrer, Koch, Spiegelberg, and others, have shown that there exists a much more intimate organic continuity between the ultimate nerve terminations and the other tissue elements, especially the epithelial, the important bearings of which, both on physiological and pathological processes, cannot be overlooked in its clinical relations. I believe, further—and strict physiological analogy permits the deduction as legitimate—that nerve force may even be discharged free into and affect the fluid contents of the animal cells, and in the same manner influence the blood itself, which, in every sense and purpose, is a living tissue, endowed with the highest organic and functional mobility. It is, perhaps, through this presumed neuro vascular association that we may find the channel by which maternal impressions are conveyed to the fetus; and it is more reasonable to suppose that the contents of the blood vessels are in this manner directly affected by nerve force than merely by the contraction and dilatation of their walls. I am not aware that this idea has ever been previously suggested, and I offer it with due reserve. The uterus receives the greater part of its nervous supply from the hypogastric branches of the posterior mesenteric ganglion, and partly also from the sacral plexus. The important observations of Patenks, of St. Petersburg, show that these also include the coats of the uterine blood vessels in their distribution.

According to the experiments of Basch and Hofmann, electrical irritation of the hypogastric nerves causes contraction of the circular muscular fibres, under which the uterus descends and the os opens; while, under similar excitation of the sacral plexus, the longitudinal muscular fibres contract and the os uteri closes. These latter observations settle definitely the previous but contradictory views of Spiegelberg and of Frankenhäuser, the former of whom denied motor power to the hypogastriacs, and the latter to the sacrales. The cervix uteri is peculiarly rich in its nerve-supply, as might be expected from its exalted sensibility and active functions. As has been pointed out by Dr. Braxton Hicks, the uterus is the only organ in the body whose main nervous supply is derived from the sympathetic, to which we have such access, and which can be so freely handled and examined. It is, indeed, a great example of the decentralization of that system. Dr. Reimann, of Vienna, found that the uterus separated from the cerebro-spinal axis, and also when removed from the body, responded to irritation by peristaltic and rhythmical movements of the whole organ, even when only

a portion of it had been irritated; that also, removed from the body, but maintained at its normal temperature, it exhibited systolic movements for an hour after the death of the animal. The uterus has, then, an independent ganglionic system connected with, and therefore influenced by and reacting through, the cerebro-spinal system, but organically related to and derived from the sympathetic. The arrangement and distribution of the uterine blood vessels is peculiar to that organ, as shown by the investigations of Rouget and Snow Beck. The arterial and venous systems freely anastomose, and seem more dependent on the contractility of the permeated tissues than on the elasticity of their own walls for propelling the blood. Hence the effect of general debility, or, on the other hand, of hyperemia, in causing or favoring uterine congestion and hemorrhage. This anatomical peculiarity of the uterine vascular system has important bearings on the occurrence and treatment of parturient and other forms of uterine hemorrhage.

The address in the Section on Medicine was by Dr. E. L. Fox, of Bristol, and was occupied with the relation of the conditions of the blood and blood vessels to the health of the tissues, following Virchow's theory that the initiative in diseases of the textures of the body lies in the texture itself, and not in the blood conveyed to it; and modifying it by pointing out the influence exerted by varying calibres in the blood vessels of a part.

Mr. W. MARTIN COATES, in the address before the Section on Surgery, described an operation for the removal of internal piles, by means of some instruments devised by himself.

The Section of Public Medicine was opened by Dr. ARTHUR RANSOME, of Owens College, Manchester, who enjoys a deservedly high reputation in this branch. He spoke of the need for a systematic study of epidemic diseases, and formulated the requirements for this study in the following measures:—

1. There would be needed an army of well-trained observers; for it would be hopeless for any single man, or even for any small body of men, to undertake such a gigantic task.
2. We should require continuous and accurate observations of epidemic diseases, taken at sufficiently short intervals, and having regard to both mortality and sickness; the cases recorded being accurately ascertained, both as to time and place of origin.
3. These observations would have to be collected and collated by some central authority.
4. Comparisons would need to be made between these records and certain concurrent circumstances.
5. Local inquiries must be carried out, and

directed to the mode of origin of the epidemics, their incidence on different ages, sexes, and occupations, their fatality at different periods, their several varieties; and, finally, their pathology, and their relations to other forms of disease.

6. There would further be needed experimental and other researches on the intimate nature of contagion, and on the microscopic forms associated with each disease.

7. There would remain various geographical, anthropological, and even historical questions, that would need to be investigated before our knowledge could be considered as complete.

Although, of course, all these means are not yet available, we should try to make them so, and the lecturer pointed out the great public advantages of such efforts.

NOTES AND COMMENTS.

Treatment of Smallpox by Ether and Opium.

In a recent séance of the Académie de Médecine, M. Du Castel read a memoir on the above subject. In his service in the Hôpital St. Antoine he observed seventy-six grave cases; thirty-six among these, having confluent small pox, were treated in this way. In almost all the cases suppuration did not take place, and desiccation occurred from the sixth to the ninth day. The following observations may be taken as typical: A girl of twenty-two entered the service on the day of the eruption, with grave general condition, extreme agitation, skin scarlatiniform in color, and covered with small papules placed very near each other. Temperature 40° (Centigrade).

The next day the contents of a hypodermic syringe of ether was injected; fifteen centigrams of thebaic extract and fifteen drops of sol. ferri perchlorid., in 125 grams of water, was administered.

On the 26th inst. (three days later) a few scattered vesicles were formed; desiccation took place without suppuration, and was complete two days later.

The risk of abscess following the ether injection is avoided by inserting the needle deep into the tissues.

This treatment appears much more efficacious in vaccinated persons.

The best method of applying the treatment is to inject the contents of a hypodermic syringe of ether morning and evening, giving fifteen to twenty centigrams of extract thebaic and fifteen drops of sol. ferri perchlorid., much diluted, in the course of the day. M. Du Castel, in concluding, hoped that further research would be devoted to the subject.

Distribution of the Branches of the Lumbar Plexus.

At a recent meeting of the Société de Biologie (July 30th), M. Paul Bert gave the results of researches undertaken in collaboration with M. Marcacci, regarding the final distribution to the muscles of the nerves of the lumbar plexus.

Two hypotheses have been put forward on this subject: 1. Is each muscle animated by a branch having origin from several roots? or, 2. Is each root connected with several muscles, so that it controls one group only of extensors, flexors, etc.?

From experiments on the lumbar plexus in the dog, M. Bert is led, by the results of his extensive researches, to consider the second hypothesis as best founded.

In effect the first root of this plexus presides over the contraction of the sartorius, the anterior rectus and the psoas; that is, over the flexion of the thigh on the pelvis. The second radicle controls the movements of the anterior part of the vastus externus, of a portion of the tensor fasciæ and of the vastus internus; it directs the extension of the leg. The third root sends branches to the remaining portion of the vastus externus and to the anterior part of the triceps. The fourth root is distributed to the posterior part of the biceps, the semi-tendinosus and the semi-membranosus, and to the second and third adductors. This root, then, controls a double movement—extension of the thigh and flexion of the leg on the thigh. The fifth root in the dog is destined to the movements of the entire tail.

From these experiences it is possible to class the muscles in groups innervated by different motor roots; to each department corresponds one particular root, and this latter responds to a medullary centre limited to its point of origin.

Infantile Inebriety.

Dr. J. H. Musser reports, in the *Philadelphia Medical Times*, a case of acute alcoholism in a boy, aged four years, whose mother keeps a small grog-shop. At 4 P. M. on the 27th of July last she found her little son behind the bar, draining a tumbler, which it was afterwards ascertained contained four ounces of whisky, of its contents. In fifteen minutes he was stupid, and in fifteen more he was unconscious. According to a neighbor's statement, at 6 P. M. "he was like death," pale and cold, with a cold, clammy perspiration on face and body, with an excessively frequent and very feeble pulse, and breathing heavily. He was placed in a hot mustard bath and rubbed with whisky. Reaction set in

in an hour. Not regaining consciousness, however, the doctor was sent for. He saw him at 11 P. M. in the following condition: Skin hot, dry, red; extremities warm; temperature $102\frac{1}{2}^{\circ}$; respirations 44, not stertorous; pulse 140, quick and small; completely unconscious; conjunctivæ insensible; pupils contracted and insensible to light; general anæsthesia. After considerable effort emesis was brought about; food and a large quantity of a pink-colored mucus and fluid were discharged. The breath and the vomited matter were of a strong alcoholic odor. After vomiting he could be slightly aroused, but consciousness returned gradually, and he did not recognize his mother until 6 A. M. of the next day. That day a foul tongue, no appetite, and an irritable temper were the only symptoms noted.

According to the doctor's statement, this boy has frequently been tipsy, and smoking the strongest cigars has been a daily luxury with him for more than a year.

Ergot in Tuberculosis.

A writer in the Cincinnati *Lancet and Clinic* suggests, on theoretical grounds, the use of ergot in the early stages of tuberculosis, with a view to prevent the formation of tubercular deposits. "We know," says he, "that ergot contracts blood vessels. Would it not be possible that, by giving ergot as soon as we are aware of tubercular matter being formed, it would contract the blood vessels and prevent the exudation and somatic condition of the blood vessels' walls? Even if ergot is given later on in the disease, and deposits have taken place, if we can stop the further progress of the disease, the deposits that have already been formed are likely to undergo fatty or calcareous degeneration, and do no harm. It might be possible that by the action of ergot in conjunction with alcohol and cod-liver oil, it might be of some benefit, if nothing more."

We hope he will try it, and then let us know the result.

Epilepsy Caused by Menorrhagia.

According to Dr. William A. Hammond, in the *Medical Gazette*, October 1, 1881, epilepsy is rarely caused by menorrhagia, it being generally the case that when associated with menstrual disturbance it has a suppression of the function or a diminished flow as its cause. Not infrequently, also, epilepsy which may have existed from early childhood ceases when the catamenia make their appearance.

The following case he therefore regards as specially interesting: Miss S., 18 years old, was of good health till the occurrence of her catamenia, during her fifteenth year. While the discharge was at its height, and apparently the function was being performed with entire regularity, she was suddenly seized on awaking in the morning with an epileptic paroxysm of great severity, during which she foamed at the mouth, was violently convulsed, and bit her tongue badly. From this time on, with each successive menstrual period, she had an epileptic convulsion, and, as her periods came round with perfect regularity, she had had about thirty seizures when she came under observation.

Upon careful examination the Doctor could discover no ovarian tenderness, and he was about to send her to a gynecologist for a more complete search for some cause connected with the generative system when, in answer to his question, she informed the Doctor that the discharge was very profuse. Upon this hint he acted, and advised that for a week before the next expected menstrual period she should take a teaspoonful of the fluid extract of ergot three times a day, and continue the medicine during the whole time of the flow. In a couple of weeks she returned and reported that she had faithfully followed his prescription, and that she had passed through the whole of the last period without the least sign of an epileptic seizure, and also that the quantity of the menstrual discharge had been greatly diminished. She has continued to pursue this treatment up to the present time, though a year has elapsed, and she has had no return of the epilepsy.

In this case the Doctor thinks that the convulsions were due to cerebral anæmia, consequent upon the excessive loss of blood; and the ergot, by diminishing the flow, prevented the consequent deprivation of blood to the brain.

How to Prevent the Formation of Sediment in Magendie's Solution.

According to Dr. Walter P. Gillette, of New York, in the *Medical Record*, Magendie's Solution may be preserved for an indefinite period by the addition of two drops of carbolic acid to an ounce of the solution.

Having adopted this combination about ten years since, the Doctor states that he has not had an abscess, nor even a cellulitis, form from the result of a hypodermic injection of morphine. The device was given to him by a physician addicted to the morphine habit by the hypodermic method.

He had been a frequent sufferer from abscesses until he set to work to study the flocculent deposit in Magendie's solution, after it has been prepared a few days. This deposit, he said, was a vegetable fungoid, which could be distinctly observed under the microscope, and was, in all probability, one of the irritating causes which light up suppurative cellulitis, in the course of hypodermic injections of this liquid.

Nitrite of Ethyl as a Disinfectant.

In the *Jour. de Med. de la Haute-Vienne*, M. Peyrussou proposes to purify the air of hospital wards, sick rooms, etc. by the vapors of nitrite of ethyl, which are diffused in the atmosphere from a mixture of alcohol and nitric acid.

These two ingredients may be placed in porcelain capsules, saucers, etc., and gently heated by placing them in hot water.

But he has found it necessary to change the proportions of the ingredients usually directed for the preparation of these ethers, so as to avoid the development of acid vapors; he generally employs the following mixture—

R.	Alcohol at 90°,	4 parts.	
	Nitric acid at 36°,	1 part.	M.

In these proportions the alcohol is in great excess, saturates completely the acid vapors, which are nevertheless more active, being just in the act of formation at the moment they undergo decomposition through the impurities of the alcohol.

This system, thus simplified, would be of great utility in the hospitals, maternities, etc., for 50 grams of this mixture would suffice for 100 cubic meters of air, and the capsules containing it could be placed at intervals in the ward.

Finally, this mode of purifying the air, which is inoffensive and agreeable, destroys the volatile bodies which produce infection, and is the only substance which acts on the germs of fermentation and putrefaction, sometimes contained in large quantity in the air, particularly in hospital wards. This means may then render great service against these myriads of infinitely small organisms which attack us on every side, and are the primary cause of contagious diseases.

Nitrate of Lead in Ulcerated Cancer of the Uterus.

M. Cheron, in the *Revue des Maladies des Femmes*, remarks that he was led to employ nitrate of lead in the treatment of ulcerated epithelioma of the cervix uteri, by the good reports from Italy regarding the benefits obtained from this drug in ulcerated cancer of the organ.

The ulcerated surface is first touched or cleansed with a tampon of charpie dipped in glycerine, and then, after the injection of a litre of water, containing five grams of perchloride of iron, if there is any slight flow of blood, as frequently happens, the surface is dried with charpie; then the nitrate of lead, mixed with lycopodium, forming a powder, is dusted over the surface, and a tampon of cotton wool introduced to retain the powder in place.

The best mixture is the following:—

R.	Plumbi nitrat. pur.,	$\frac{3}{4}$ ss	
	Lycopod. pulv.,	$\frac{3}{4}$ j.	M.
	Et ft. pulv.		

Under the influence of these applications, suppuration becomes considerably diminished, as also the bad odor. Hemorrhage even becomes suppressed. After twelve or fifteen dressings, the engorgement in the culs-de-sac is not so marked, and the general health is decidedly better. In fact, nitrate of lead seems capable, among so many useless remedies, of rendering great service in epithelioma of the cervix.

CORRESPONDENCE.

Medication in Yellow and Pernicious Fevers.

[We publish, at the request of a correspondent, extracts from the following letter, believing that its suggestions merit consideration. It was addressed to Dr. R. H. Day, of East Baton Rouge, La.—ED. REPORTER.]

DOCTOR:—* * * From my experience also with malignant congestive fever in former years, in the South, I was impressed with the great advantage of the combination of calomel with quinine, in arresting the fatal recurrence of the paroxysm; and in numerous cases of what is styled in Brazil pernicious fever, I have had occasion to note the salutary effect of this combination.

The efficacy does not depend upon the administration of calomel and afterwards of quinine, but in the introduction of these agents conjointly into the system; and if a word from me can avail anything with those who are in a position to test this mode of practice, I would urge upon practitioners not to delude themselves with the idea that the same results can be obtained by a resort to these articles consecutively.

Those who have used them after this order in epidemics of yellow fever without the desired result, may suppose that it is quite unnecessary to vary their plan by conjoining them in the same powder or pill. But I am so thoroughly convinced that the effect of their united action is quite different, and far more beneficial, that I hail the appearance of the recommendation made in your article as a new era in the treatment of yellow fever, which no one should disregard. Let us try, it with faith in its virtues, and should

it fail in some cases, it is only left for the practitioner to reflect that nothing else affords a better prospect of success, and his conscience may rest easy in having adopted a reasonable and safe measure for the arrest of an otherwise fatal disease. Those who have had the most varied clinical experience should not reject this simple expedient, in view of the salutary results reported by you.

In April, 1876, there occurred in this city some serious cases of disease with all the characteristics of yellow fever, even to the appearance of black vomit, in the fatal termination of a large proportion, in which this combination of calomel and quinine was instrumental in saving the few cases which escaped. I have also employed it in cases that were brought here from the hot-bed of yellow fever, at Santos, with salutary results.

The great advantage of the treatment consists in its applicability in like manner to all the grave forms of malignant bilious fever that may appear synchronously with yellow fever, and hence the propriety of resorting to it without the necessity of a well defined diagnosis.

It may be held as unwarrantable by the more scientific nosologists to adopt any course of treatment prior to a clear and distinct declaration of the characteristics of a disease, and as the black vomit is, perhaps, the only unmistakable symptom of yellow fever, the theory of all such would require us to await its development before deciding upon a special medication. But in the common sense view of most practitioners, the indications would be sufficiently clear very early in every case occurring in a yellow fever district, to adopt this recourse, and as you have remarked, it may be resorted to at the outset of the hot stage with the same result of cutting it short and terminating all danger from the further progress of the disease. It thus turns out that "when ignorance is bliss 'tis folly to be wise," and the road is so plain that "the wayfaring man, though a fool, cannot err therein." I take it that all else that may be done in a case of yellow fever belongs to the class of palliatives; and if this radical measure of twenty grains of calomel with thirty grains of sulphate of quinine, divided into four doses, of which one is given every two hours, seems to arrest the paroxysms, the subsequent treatment will be of comparative indifference.

Yet holding that your suggestions are judicious in regard to the measures to be adopted, I beg to submit a modification of one part of the routine adopted for the relief of irritability of the stomach, and propose a formula which has given the most satisfactory proof of its efficacy, viz: Lime water three ounces, camphor water two ounces, mint water one ounce, of which one or two tablespoonfuls may be given every half hour, with longer intervals when improvement in this symptom occurs. While the morphine, mint water and bicarbonate of soda may be applicable to the greater number of cases, it may be that the above will afford relief in some cases when this fails, and hence it should be remembered by those entering the contest with this terrible antagonist.

J. McF. GASTON, M.D.

Campos San Paulo Brazil.

A Strange and Dangerous Course taken by a Bullet.

ED. MED. AND SURG. REPORTER:—

John Lenaham, of Centralia, Pa., *et.* 20 years, stout, strong, and robust, came to Ashland, a town about two miles distant, on Saturday evening, the 17th inst., with another young friend of about the same age, and while there they purchased a revolver (Smith and Wesson, calibre No. 32), and while on their way home in the evening the pistol was accidentally discharged, while the young man was about six yards behind him. He was immediately taken home in a carriage, and there two local physicians were called in to see him. They did considerable probing and cutting of the surface tissue in their efforts to find the location of the bullet. After working hard for some time they gave the matter up as a bad job, thinking the missile had entered the thoracic cavity, "and thereby perforated the lung," owing to the fact that the patient had expectorated some blood, which they said was very red in color, and he had some difficult breathing, with cough. I was called in to see him about twenty-four hours after the accident, and I found that the bullet had struck the ninth rib, about one inch to the left of the spinous process of the dorsal vertebra, and then glancing outward and upward, passed under the scapula, and under the coracoid process and clavicle; I found it embedded deeply in the pectoral muscles. I made an incision about two inches in length over the location and found it embedded about one inch in depth, from which I removed it without much difficulty. The next forty-eight hours he suffered with considerable traumatic fever, caused by fright and pain, but now he is improving rapidly without any other complication. I attribute the expectoration of blood to the injury the lung received from the rib being suddenly sprung against it when the bullet struck it. He is at this time able to get out of his house.

Ashland, Pa.

WILLIAM R. OWEN, M.D.

Rupture of the Bladder, With Recovery.

ED. MED. AND SURG. REPORTER:—

In your journal, No. 10, are published two cases of rupture of the bladder, which prompts me to report a case occurring within my own practice:—

In August, 1880, Mrs. T., of Oakdale, was stepping upon the steps at the entrance of a neighbor's house, when she lost her balance, and fell back, striking the ground on her hip, a distance of about two feet. Soon she began to feel a sickening sensation, and distress in the lower part of the bowels and back. She kept around, however, sufficiently to prepare supper for her husband, but could eat nothing herself. She passed a restless and painful night. The next morning she sent for her physician, Dr. Osler. He recognized some severe internal injury, but could not determine the extent. She had not passed water since the accident, although she had the desire to do so. The doctor introduced the catheter and drew off over an ounce of urine. During the day there was vomiting several times, and towards evening subsultus, thirst, with increasing tenderness, and she was evidently grow-

ing worse. Thirty hours after the injury I saw the patient with Dr. Osler. Found the pulse 120, skin inclined to moisture, anxious countenance and hiccough. There was tenderness and considerable fullness in the region of the bladder, but no extended tympanitis. The catheter was again introduced but it drew only a few drops of urine. The bladder was completely flattened over the swelling or tumor beneath. The uterus was explored, and found of normal size, but moved to the right side. By this time we were satisfied there was rupture of the bladder, and we informed the husband of the almost certain fatality. Further vaginal examination revealed a tumor posterior to the os uteri, having a distinct fluctuation. Into this an exploring needle was inserted, which settled the diagnosis. A larger incision was made, by which about two pints of sero-purulent urine escaped. Manifest relief soon followed. The next day the graver symptoms had subsided, and the case appeared more hopeful.

After this time she remained under the assiduous care of Dr. Osler, who treated her with carbolic acid wash, the frequent use of the catheter as a drainage tube, and opium and quinine internally. She recovered in eight weeks, having had one slight relapse of fever during the time.

Mrs. T. was about forty years old, light complexion, and inclined to be fleshy, and has had several children. As there were but few symptoms of peritonitis, it is fair to conclude that the rupture in the bladder was chiefly or wholly outside of the peritoneum, which let the urine escape into the pelvic connective tissue.

Of over fifty cases of this injury mentioned in Holmes' System of Surgery, all were fatal, but three. Of the three which recovered there was only one in which the rupture and urine extended within the peritoneum. A. T. HUDSON, M.D.

Stockton, Cal.

A Double Monster.

ED. MED. AND SURG. REPORTER:—

In November last Dr. John T. Sims, of this county, was summoned to attend Mrs. —, a multipara, in labor. The only thing unusual in her condition was the fact that she had been having repeated attacks of chill and fever for some weeks previous, and was from that cause considerably prostrated. She had, according to her computation, arrived at full term. The pains were frequent and forcible, and an examination per vaginam revealed a natural presentation of the vertex and everything indicative of a speedy delivery. Soon the head was distending the vulva, but after this there was no further advance, notwithstanding the pains continued or were increased in frequency and force, aided by the expulsive efforts of the woman. The doctor made repeated examinations and could detect no cause for the sudden arrest of the advancing head. Having no instruments of any kind with him, he made such traction as he could with his fingers hooked around the vertex as best he could, but still there was no advance. He then requested that Dr. George W. Farrar, of Dawson, be sent for, to aid him in the delivery. It being near ten miles from the patient's house to Dawson, it had

been eleven hours that the head had been in that condition when Dr. Farrar reached the patient. He also carried no instruments with him. Finding the woman almost exhausted, it was decided that it would not be safe to wait until they could send for an obstetrical case of instruments. Dr. Farrar succeeded in passing a section of a common roller bandage, about one inch in width, up the side of the foetal head and across the inferior maxillary, and bringing it down on the opposite side of the head, then grasping both ends of the bandage and using considerable traction, he succeeded in delivering the head. Upon passing his fingers up beside the neck of the foetus he was surprised to find another head presenting, and to his still further surprise it descended in advance of the shoulders which he was trying to extract, and was soon delivered. Soon afterwards the entire child or children were extracted, stillborn. They presented the following appearances: There were two well formed, well developed heads, rather larger than the average; two perfect faces; two necks; two spinal columns down to one common sacrum, two sternums, and to appearances there are two complete pairs of lungs, and two hearts; a common abdomen, with probably only one set of digestive organs; one pelvis, and two inferior extremities. There are only two superior extremities visible, both perfect in all respects; one from each outside shoulder, right and left. At the proper place between the two necks there is a third or common shoulder that answers for each head; there was only one umbilicus. The cord and placenta were rather larger than is usual. After the cord was cut and the placenta removed, the child or children weighed eighteen pounds.

The mother died on the eighth or tenth day after delivery, from exhaustion; possibly as much from malarial poisoning as from the delivery. As this child or children are so perfectly developed, I have no doubt, could they have been promptly delivered, but what they would have had as good a chance for life as ordinary children. I further concluded that it was entirely practicable to have delivered them promptly with an ordinary obstetrical forceps, but unfortunately, it is a custom with most of the physicians of this vicinity never to carry any obstetrical instruments with them when called to a case of labor, trusting to sending for them when needed. In fact, very many of them do not own any, and rely upon borrowing from their neighboring brethren, when they are so unfortunate as to need them. *Dawson, Ga.* C.

NEWS AND MISCELLANY.

Law Prohibiting the Sale of Ebolic Medicines.

A bill is pending before the Missouri Legislature, presented by Hon. Lewis Myers, for the purpose of preventing the indiscriminate sale of abortifacient medicines.

SECTION 1 provides that no known ebolic medicine shall be sold or given away, except upon a written prescription of a physician.

SEC. 2 provides that a record shall be kept of the sale of any such medicine.

SEC. 3 prohibits the sale of all drugs "designed expressly for the use of females," until two physicians have examined them and pronounced them non-ebolic.

SEC. 4. No publisher or printer of any newspaper, or any other person, shall, directly or indirectly, advertise any pills, mixtures or powders, designed expressly for the use of females, before receiving a certificate from two or more respectable and legally authorized practicing physicians of this State, to the effect that said mixtures, powders or pills are not ebolic or abortifacient in their action or effect.

SEC. 5. Any person failing to comply with any of the provisions of this act shall, upon conviction, be fined not less than fifty nor more than two hundred dollars, to be recovered by indictment or information, as now provided by law in cases of misdemeanor. And in case the death of any person shall result from the use of any ebolic or abortifacient medicines, pills, powders or compounds, sold or given away, in violation of any of the provisions of this act, the person selling or giving away the same shall, upon conviction, be punished by imprisonment in the penitentiary not less than two nor more than ten years.

SEC. 6 provides that physicians furnishing ebolic medicines to pregnant females will be guilty of felony.

The provisions of this law were drawn up by Dr. A. W. Sawyer, of Arbela, Mo. While the design is praiseworthy, we do not believe, as drawn, that it will prove effective. Quinine is an ebolic, according to many authorities. Shall its sale be prohibited? When publishers of newspapers advertise patent medicines, is it practicable for them to obtain certificates of their composition? We doubt it.

The President's Case.

The case of our lamented President has, with questionable taste, been continued, in "personal statements" in the journals, both medical and lay, after his death and before the publication of the official record. It is, however, no doubt, a matter of pride with some energetic editors to obtain these statements, and whatever is justly due them on this score they should have.

The *Medical Gazette* was first in the field, with the personal statement of Dr. Hamilton. This, it should be said, was merely a verbal answer to the inquiries of the representative of the *Gazette*, and gives his views as to the position of the assassin, the cause of the mistaken opinion as to the location of the ball, and the general treatment.

Later, by some issues, we have Dr. Bliss' statement in the *Medical Record*, written, he says, for the profession, but advance proofs of which were sent to numerous daily newspapers, etc.!! He excuses his conduct toward Dr. Baxter by the plea that the President asked him (Bliss) to take charge of the case; or, more accurately, that he asked the President whether he should do so, and the President signified assent. If this plan of obtaining patients is to be approved and adopted, let it be generally known. It is an easy plan.

Dr. Boynton, we understand, also had a

"statement" ready, but at the request of Mrs. Garfield, has withheld it, for which they both deserve credit. There will be a correct official record presented to the public in due time, and these one-sided histories are prompted more by love of notoriety than scientific enthusiasm, and as such would have been better left in manuscript for the present.

German Sanitary Congress.

The German Sanitary Congress was opened in Vienna on September 15. The post of President was taken by Duke Theodore, of Bavaria, Doctor of Medicine, and brother of the Empress Elizabeth, who delivered an inaugural address. A Vienna telegram states that, besides a considerable number of German and Austrian sanitarians, two Russian professors—Moskiewits, from Warsaw, and Eigmann, from St. Petersburg—are present, together with two lady doctors from Russia. The chief subjects of the papers and discussions are epidemic diseases, disinfection, the management of and attendance at funerals, water, school hygiene and public soup kitchens.

New Preparations.

PACKER'S TAR SOAP.

A convenient and neat method of applying tar is always a desideratum in practice, and from our experience with it, we can say that "Packer's Tar Soap," will be found just the article wanted in the numerous cases of skin disease in which tar is introduced. It has been and is used by many of our best dermatologists, and they commend it strongly.

American Ovariectomies.

Dr. Horatio R. Bigelow, Washington, D. C., is preparing a paper on American ovariectomies, and will be glad to receive from the profession full reports of all such cases. Dr. Bigelow's address is 1502 Fourteenth street, Washington.

The Tri-State Medical Society

Holds its Seventh Annual Meeting in St. Louis, October 25th, 26th and 27th. Dr. H. C. Fairbrother, East St. Louis, Chairman of Committee on Arrangements; Dr. G. W. Burton, Mitchell, Indiana, Secretary.

OBITUARY NOTICES.

—We learn, with sorrow, that Prof. William Warren Green, of Portland, Maine, who was a delegate to the International Medical Congress, died on his way home, and was buried at sea. Dr. Green was well and favorably known as a surgeon, teacher and writer.

—Professor James P. White, President of the faculty of the Medical Department of the University of Buffalo, died in that city, on Wednesday night, aged 71 years. Professor White was a graduate of Jefferson College, in this city.

—Charles A. Spencer, well-known in Europe and America as an optician, microscopist, and manufacturer of telescopic lenses, died in Geneva, New York, on Wednesday evening, aged 68 years.

QUERIES AND REPLIES.

Tabes Dorsalis.

Mr. Editor:—I have a young lady patient who has been suffering between two and three months with what I call *Tabes Dorsalis*; with the best treatment I have been able to give her, she improves but slightly. Her general health and appetite are commonly good, but she has no use of the right lower limb. Will some one who has had experience in these troubles advise.

W. T. B.

Dr. W. C. F., of Pa., asks: What chemicals added to heavy petroleum will cause it to saponify?

Ans. No chemicals added to petroleum will cause it to saponify. Heavy emulsions have been obtained by accident or otherwise, through the aid of alkalies; for example, a tank of petroleum, after the process of refining with sulphuric acid, was made almost solid by adding a too large proportion of soda ash, used to neutralize the acid remaining in the oil. The operator *thought* he had saponified the petroleum, but *found* he had only made a heavy emulsion.

MARRIAGES.

FOULKES—THOMAS.—In Philadelphia, August 18th, 1881, by the Rev. W. S. Fugh, William C. Foulks, M.D., and Mary E. Thomas.

JANVRIN—LA WALL.—At Easton, Pa., Sept. 1st, at the residence of the bride's parents, by the Rev. F. W. Huford, J. E. Janvrin, M.D., of New York, and Laura L., daughter of Cyrus La Wall.

MINER—HAND.—On Wednesday, Sept. 11th, 1881, at Breiland Church, Easton, Pa., by the Rev. A. Russell Stevenson, and the Rev. Dr. T. O. Porter, LL.D., Joshua L. Miner, M.D., of Wilkesbarre, Pa., and Annie K. Hand, daughter of the late Rev. A. H. Hand, D.D.

PEARSONS—ALLEN.—In Strasburgh, Vt., August 16th, by Rev. Lawrence Phelps, assisted by Rev. William Carr, J. A. Pearsons, M.D., and Finette I. Allen, both of Barton, Vt.

ROYER—COOKE.—On August 18th, at Lincoln, Lancaster, Pa., by Rev. Mr. Sonwitzer, A. S. Royer, M.D., of Ephrata and Miss Emily Cooke, youngest daughter of the late Charles Cooke, of Philadelphia.

TARR—McNUTT.—August 10th, 1881, at Pittsburgh, Pa., by Rev. David Hargreaves, of Wellsville, O., Morris C. Tarr, M.D., of Ironville, O., and Miss Jessie F. McNutt, of New Waterford, O.

WAKEFIELD—JOHNSON.—In Ludlow, Vt., Aug. 10th, by Rev. A. J. Hough, Solon R. Wakefield, M.D., of West Salem, Wis., and Mary E. Johnson, of Ludlow.

DEATHS.

AMERY.—In Cincinnati, Ohio, on Wednesday, Aug. 24th, 1881, at ten minutes to four o'clock, P.M., Samuel A. Amery, M.D., aged 37 years, 3 months, and 23 days.

CARPENTER.—In New York, Sept. 1st, 1881, Elijah W. Carpenter, M.D., aged 67 years.

DALTON.—On the 26th inst., G. E. Dalton, M.D., aged 36 years, son of G. E. Dalton, M.D., of Cincinnati, Ohio.

HAND.—In Cincinnati, Ohio, suddenly, on the morning of the 1st inst., of paralysis of the heart, Francis C. Hand, M.D., son of James C. and Anna M. Hand, in the twenty-ninth year of his age.